Organizing Partners

Convened by

Local and Regional Partners

International Partners

Sponsors and Supporters

The conference gratefully acknowledges the generous support provided by the following donors

Major Industry Sponsors

Cooperating Governments

Cooperating Institutions
Scientific Programme Committee (SPC)

Co-Chairs
Diane Havlir, United States
Adeeba Kamarulzaman, Malaysia
Robert Zangerle, Austria

Members
Vladimir Mendelevich, Russia (Regional Focal Point)

Christine Rouzioux, France
(Track A Co-Chair)
Alexandra Trkola, Switzerland
(Track A Co-Chair)
Paula Munderi, Uganda
(Track B Co-Chair)
Anton Pozniak, United Kingdom
(Track B Co-Chair)
Ying-Ru Lo, Switzerland
(Track C Co-Chair)
Maria Prins, The Netherlands
(Track C Co-Chair)
Christiana Nöstlinger, Belgium
(Track D Co-Chair)
Barbara de Zalduondo, Switzerland
(Track D Co-Chair)
Wafa El-Sad, United States
(Track E Co-Chair)
Konstantin Lezhentsev, Ukraine
(Track E Co-Chair)
Frank Amort, Austria
(Track F Co-Chair)
Christine Stegling, United Kingdom
(Track F Co-Chair)

Track C: Epidemiology and Prevention Sciences

Co-Chairs
Ying-Ru Lo, Switzerland
Maria Prins, The Netherlands

Members
Quarraisha Abdool Karim, South Africa
Diane Bennett, Switzerland
Ivana Bozicevic, Croatia
Carlos Caceres, Peru
Jose Esperza, Venezuela
Kevin Fenton, United States
Peter Ghys, Belgium
Andrew Grulich, Australia
Richard Hayes, United Kingdom
Marie-Louise Newell, United Kingdom
Prompong Panitchpakdi, Thailand
Lynn Paxton, United States
Gerry Stimson, United Kingdom

Track D: Social and Behavioural Sciences

Co-Chairs
Christiana Nöstlinger, Belgium
Barbara de Zalduondo, Switzerland

Members
Peter Aggleton, United Kingdom
Robert Carr, Jamaica
Mary Quinn Delaney, Chile
Don Des Jarlais, United States
Suzanne de Leclerc-Madlala, United States
Peter Meylakh, Russia
Maria Raguz, Peru
Bruno Spire, France
Alice Welbourn, United Kingdom

Abstract Mentors
Joy Abraham, India
Jimi Adams, United States
Mohammed F. Al-Affi, Palestine
Rose Baryamutuma, Uganda
Indra Brar, United States
Diego Martin Cecchini, Argentina
Michaela Clayton, United Kingdom
Donn J. Colby, United States
Claudia Cortes, Chile
David Damba, Uganda
Bright Bensah Drah, Ghana
Robert Freeman, United States
Joel Gallant, United States
Rajeev Guatam, India
Clare Van Halsema, United Kingdom
Ross Hassad, United States
Shelley D. Hayes, United States
Masamine Jimba, Japan
Joseph Kagaayi, Uganda
Ellen Koenig, United States
Chandrakant Lahariya, India
Carmen Logie, Canada
Monica Malta, Brazil
Linet Masese, Kenya
Carol Metcalf, South Africa
Katherine Muldoon, Canada
Robert Murphy, United States
Mary Muyoswa Nyikuri, Kenya
Minh Ly Nguyen, United States
Emmanuel Odeke, Uganda
Isaiah Ollo, Kenya
Mar Pujades, Spain
Bernardino Roca, Spain
Najmus Sadiq, Bangladesh
Naeem H. Saleem, Pakistan
Lorraine Sherr, United Kingdom
Prameet Sheth, Canada
Donald Harry Skinner, South Africa
Miranda Zoe Smith, Australia
Ellen M. Tedaldi, United States
Leandro Fagundes Tarocco, Brazil
Caleb Thole, Malawi
Damilola Ajobe Walker, Nigeria
Sharon Walmsley, United States
Marco Antonio de Avila Vitoria, Brazil
We extend our special thanks to these individuals for the time they dedicated to the success of the conference:

More than 1200 specialists from around the world volunteered their time and expertise to serve as peer reviewers, helping to ensure that the quality of abstracts, the peer reviewing process was a critical part of designing a strong scientific programme.

The XVIII International AIDS Conference received over 10000 abstract submissions by the 10 February deadline. Given the volume and quality of abstracts, the peer reviewing process was a critical part of designing a strong scientific programme.
TABLE OF CONTENTS

Wednesday 21 July

Oral Abstract Sessions
WEAA01 Correlates of Immune Protection 17
WEAA02 T-Cell Responses in HIV Infection 18
WEAA03 Immune Activation and Inflammation 19
WEAA04 Host Restriction and Innate Immunity to HIV Infection 20
WEAB01 Malignancies in PLHIV 21
WEAB02 Antiretroviral Resistance: Clinical Implications of Drug Resistance for People Living with HIV 23
WEAB03 Complications of HIV Disease and Antiretroviral Therapy 24
WEAC01 Modeling HIV Epidemics 25
WEAC02 Preventive Interventions among Youth 26
WEAD01 Framing Positive Perceptions and Practice: Analysing and Addressing Stigma 27
WEAD02 Ensuring Safety, Security and Autonomy: Why We Must Overcome Gender Based Violence 28
WEAD03 Life-course Perspectives on Families Affected by HIV and AIDS 29
WEAD04 Managing Multiple Identities: “Bridging” Populations 31
WEAE01 Strategies for Expanding Access and Integrating Services 32
WEAE02 Cost Implications of New WHO Guidelines 33
WEAF01 Yes We Can! Community Advocating for Change 34
WEAF02 Gender Inequality and New Solutions for Old Problems? 36
WEAX01 Antiretrovirals during Pregnancy and Breastfeeding: Importance of Surveillance 37

Oral Poster Discussions
WEPDA1 Viral Persistence and Latency 39
WEPDA2 Pathogenesis of Co-Infections 40
WEPDB1 Shining Light on Vitamin D Deficiency 41
WEPDB2 Viral Hepatitis Co-Infection 43
WEPDC1 MSM and Transgender People: Addressing Prevention and Care Needs 44
WEPDC2 HIV Testing Scale-Up: Innovations and Impact 45
WEPDD1 Improving Performance of PMTCT Programs 48
WEPDE1 Innovations in Laboratory Support of Health Services 49
WEPDF1 Legal Services and Empowerment: Know Your Rights and Claim Them 50

Poster Exhibition
Track A > Basic Sciences
HIV Diversity and Epidemiology WEPE0001-WEPE0022 52
HIV Superinfections WEPE0023-WEPE0024 57
HIV Origin and Evolution WEPE0025-WEPE0031 57
Bioinformatics Analysis of Viral Diversity in Natural History WEPE0032-WEPE0034 59
Bioinformatic Analysis in Drug Resistance WEPE0035-WEPE0039 60

Track B > Clinical Sciences
Aging WEPE0040-WEPE0051 62
Non-AIDS Related Co-morbidities (e.g. Diabetes, Hypertension etc.) WEPE0052-WEPE0063 64
Neurologic and Psychiatric Manifestations, Including Neurocognitive Disorders WEPE0064-WEPE0082 67
HIV-associated Renal Disease WEPE0083-WEPE0086 71
Pharmacology, Pharmacokinetics, Role of Therapeutic Drug Monitoring, Drug Interactions WEPE0087-WEPE0103 72
Pharmacogenomics WEPE0104-WEPE0107 76
Lipoatrophy and Metabolic Abnormalities WEPE0108-WEPE0120 78
Cardiovascular Disease and Other End Organ Damage WEPE0121-WEPE0135 81
Bone and Renal Disease WEPE0136-WEPE0143 85
Other Adverse Reactions and Complications of ARV Therapy WEPE0144-WEPE0156 87
Other complications WEPE0157-WEPE0162 90

Track C > Epidemiology and Prevention Sciences
Prevention in Institutional Settings e.g. Workplace, School, Prison, Military WEPE0163-WEPE0188 92
Prevention for the General Population WEPE0189-WEPE0210 98
Prevention for Youth and Adolescents WEPE0211-WEPE0253 103
Prevention for People Who Use Drugs WEPE0254-WEPE0269 112
Prevention Addressing Gender Inequalities WEPE0270-WEPE0289 115
Prevention for Male and Female Sex Workers WEPE0290-WEPE0305 120
Prevention for Men Who Have Sex with Men (MSM) WEPE0306-WEPE0345 123
Prevention for Transgenders WEPE0346-WEPE0350 132
Prevention for Immigrants, Mobile and Displaced Populations WEPE0351-WEPE0361 134
Prevention for People Living with HIV WEPE0362-WEPE0378 136
Prevention for Indigenous Populations WEPE0379-WEPE0385 140
Vulnerability Reduction WEPE0386-WEPE0395 142
Internet Based Prevention WEPE0396-WEPE0405 144
Integrating HIV Prevention into Reproductive Health/STI Programmes WEPE0406-WEPE0410 146
Integrating HIV Prevention and Care and Treatment Programmes WEPE0411-WEPE0415 147
Integration of HIV Prevention and Other Health Programmes WEPE0416-WEPE0425 148

Abstract Book Volume 2 | www.aids2010.org
**Track D > Social and Behavioural Sciences**

Specific Issues in Prevention, Treatment, Care and Support with Women and Girls  
WEPE0427-WEPE0449  
151  
Specific Issues in Prevention, Treatment, Care and Support with Men and Boys  
WEPE0450-WEPE0454  
156  
Specific Issues for Prevention, Care and Treatment among Adolescents and Youth  
WEPE0455-WEPE0475  
157  
Influence of Race, Ethnicity  
WEPE0476-WEPE0486  
161  
Research and Programmes with Children  
WEPE0487-WEPE0489  
164  
Drug and Alcohol Use, Social and Psycho-social Issues  
WEPE0490-WEPE0515  
165  
Drug and Alcohol Related Risk Behaviour  
WEPE0516-WEPE0530  
171  
Quality of Life and Access to Care in Harm Reduction Approaches  
WEPE0531-WEPE0538  
174  
Social Networks of IDU, Family, Children, Workplace, Social Support  
WEPE0539-WEPE0543  
176  
Sexual Transmission and Drug Use, Sexual Partners, "Bridging"  
WEPE0544-WEPE0553  
177  
Social, Behavioural and Cultural Issues in Harm Reduction Approaches  
WEPE0555-WEPE0558  
179  
Dealing with Multiple Risks  
WEPE0559-WEPE0560  
180  
Positive Health, Dignity and Prevention  
WEPE0561-WEPE0571  
181  
Adaptation to Living with HIV for Individuals, Families and Communities  
WEPE0572-WEPE0598  
183  
Seropositivity: Social Identity, Disclosure and Vulnerability  
WEPE0599-WEPE0613  
189  
Growing up with HIV/AIDS: Early Infection, Children and Youth  
WEPE0614-WEPE0634  
192  
Sexual and Reproductive Health and Fertility: Considerations and Rights  
WEPE0635-WEPE0652  
197  
Experience of Discrimination, Stigma, Social Exclusion and Criminalisation  
WEPE0653-WEPE0673  
201  
HIV/AIDS and the Workplace, Unemployment, Return to Work and Rehabilitation  
WEPE0674-WEPE0685  
205  
Living with ART: Impact, Quality of Life, Body Change and Sexual Behavior  
WEPE0686-WEPE0703  
208  
Living with Co-infections: TB and HIV, HCV, HPV and HIV  
WEPE0704-WEPE0709  
212  
Psychological Well Being and Mental Health  
WEPE0711-WEPE0727  
213  
Aging with HIV - Social and Behavioural Issues  
WEPE0728-WEPE0737  
217  
Access and Availability of HIV/AIDS Treatment and Care, Health Services and Mental Health  
WEPE0738-WEPE0772  
220  

**Track E > Economics, Operations Research, Care and Health Systems**

Innovative Private-sector HIV Programmes  
WEPE0773-WEPE0781  
228  
Public-private Partnerships for HIV  
WEPE0782-WEPE0797  
230  
Faith-based HIV Programmes  
WEPE0798-WEPE0803  
233  
Traditional Healers and HIV Programmes  
WEPE0804  
234  
Outcome Evaluation for HIV Programmes  
WEPE0805-WEPE0818  
235  

**Track F > Policy, Law, Human Rights and Political Science**

Laws and Policies Addressing Risk and Harm Reduction  
WEPE0867-WEPE0871  
250  
Law Enforcement and Criminal Justice (Including Prisons, Pre-trial Detention and Other Closed Settings)  
WEPE0872-WEPE0879  
251  
Child Welfare  
WEPE0880  
252  
Social Assistance and Welfare  
WEPE0881  
253  
Laws and Policies on Immigration and Travel  
WEPE0882-WEPE0886  
253  
HIV/AIDS and Patient Rights – Human Rights in Health Care Settings  
WEPE0887-WEPE0890  
254  
Sexual and Reproductive Health and Rights for Women and Girls  
WEPE0891-WEPE0900  
255  
Violence Against Women and HIV  
WEPE0901-WEPE0908  
257  
HIV and the Rights of Adolescents  
WEPE0909-WEPE0911  
259  
Policies of Sexual Regulation  
WEPE0912  
260  
Roles and Responsibilities of People Living with HIV and Vulnerable Populations  
WEPE0913-WEPE0921  
260  
Roles and Responsibilities of State, Civil Society and the Private Sector  
WEPE0922-WEPE0938  
262  
Capacity Building for Leadership and Advocacy  
WEPE0939-WEPE0950  
266  
Evidence-based Advocacy on Budget and Policy Priorities  
WEPE0951  
268  
Access to Information, Transparency and Accountability  
WEPE0952-WEPE0957  
269  
Role of Media in Policy Making  
WEPE0958-WEPE0963  
270  
Role of Health Providers and Professionals  
WEPE0964-WEPE0967  
271  
Role of International Organizations and Institutions  
WEPE0968-WEPE0972  
272  
Roles and Responsibilities of the State, Civil Society and Private and Business Sectors  
WEPE0973-WEPE0976  
273  
International Trade Law and Intellectual Property  
WEPE0978-WEPE0980  
274  
International Drug Control Law and Policy  
WEPE0981-WEPE0984  
275  
International Human Rights Law and Policy  
WEPE0985-WEPE0987  
276  
Trade, Patents and Pharmaceutical Production and Availability  
WEPE0988-WEPE0990  
276
SESSION CODING
Example: MO-AA-01-01 = (Day) MO – (session type) AA – (session order) 01 – (speaker order) 01

WEEKDAY
SU (Sunday)
MO (Monday)
TU (Tuesday)
WE (Wednesday)
TH (Thursday)
FR (Friday)

SESSION TYPE

SESSION ORDER
01, 02, 03, 04 etc

SPEAKER ORDER
01, 02, 03, 04 etc

ABSTRACT SESSIONS

ABSTRACT ORAL PRESENTATIONS
AA (Track A)
AB (Track B)
AC (Track C)
AD (Track D)
AE (Track E)
AX (Cross cutting themes)

POSTER DISCUSSIONS
PDA (Track A)
PDB (Track B)
PDC (Track C)
PDD (Track D)
PDE (Track E)

POSTER EXHIBITIONS
PE0001 (Board number)

Disclaimer
No responsibility is assumed by the organisers for any injury and/or damage to persons or property as a matter of product liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of potential inaccuracies on the part of authors or typists and because of the rapid advances in the medical sciences, we strongly recommend independent verification of all data, diagnoses and drug dosages.
WEA0103 Animal model of elite controlled infection

C. Apte1,2, T. Gaunt1, D. Mandell1, R. Gautam3, J. Pandrea1,2

1University of Pittsburgh, Center for Vaccine Research, Pittsburgh, United States, 2Tan Tai Yong National Primate Research Center, Microbiology, Cavinton, United States

Background: Understanding the mechanism of elite control (EC) of HIV in infection may shed light on the correlates of control of disease progression. However, limitations of the study of human EC (less than to late time points in infection, after control is achieved, on samples collected at random time points and limited access to tissues) have prevented understanding the mechanisms of EC HIV infection. An animal model of EC infection in which control is achieved in all animals (thus enabling the study of early events that may drive EC infection) is not available.

Methods: Five rhesus macaques (RMs) were infected with SIVagm. Viral loads (VLs) in blood and tissues, viral evolution, dynamics of major immune cell populations and subsets, and immune responses were followed as long as 6 years. CD8 cells were depleted using CM-T87.

Results: SIVagm infection in RMs is characterized by: high levels of VLs and dramatic mucosal C4D+ T cell depletion during acute infection, both similar to HIV-1 infection, followed by complete control of SIVagm replication, defined as: undetectable VLs beginning 72 to 90 days postinoculation and continuing through at least 6 years; lack of viral replication in peripheral blood mononuclear cells, lymph nodes, and intestine; seroreversion; progressive recovery of mucosal C4D+ T cells, with complete recovery by 4 years postinoculation; and normal levels of T cell immune activation, proliferation, and apoptosis; and lack of disease progression. Control is independent of MHC types or partial APOBEC restriction.

We report the development of an animal model of EC of SIVagm infection (EC-SIVagm) resulting in robust transient control of viral loads in blood and tissues, before the defining characteristics of EC are evident.

Presenting author email: apte061@pitt.edu

WEA0104 Specific phenotypic and functional features of natural killer cell response to HIV-infected long-term non-progressors and HIV-controllers

V. Vielh2, R. Fausther-Bovendo1, A. Samii, P. Dedieu1, French Aromaticism & Long Term (ALT) controllers - data from the German NoVi Cohort

1INSERM UMR-S 945, Paris, France, 2IFR113, Paris, France

Background: Recent evidence suggests that natural killer (NK) cells play a crucial role in the HIV pathogenesis. Long-term non-progressors (LTNP) and HIV-controllers are rare HIV-infected patients who control viral replication and show delayed disease progression. They represent fascinating models of natural protection against disease progression, and for studying the immunological response to the virus.

Methods: We have conducted an extensive analysis of the phenotypic and functional properties of CD56dim, CD56bright and CD56/CD161 NK cell subsets from LTNP and HIV-controllers, and compared them to HIV-progressors and healthy donors.

Results: Hierarchical clustering analysis of NK phenotypic markers revealed that LTNP and HIV-controllers, exhibit peculiar phenotypic features, associated with high levels of interferon-γ, activation markers, and cytolytic activity in CD3CD56- NK cells against autologous targeted cells. More importantly, cytolytic activity against autologous CD4+ T cells is abrogated after treatment with anti-Nkp46 mAb in LTNP and HIV-controllers, but not in HIV-progressors.

Conclusions: In contrast, in HIV-controllers and healthy donors, Nkp46+ expression on CD4+ T cells and autologous NK lysis were both poorly detected.

These results show that NK cells from LTNP and HIV-controllers display phenotypic and functional features, which suggests a consistent and evolving role of the innate immune response in the control of pathogenesis.

Presenting author email: patrice.debre@cea.fr

WEA0105 CD4 slope in HIV elite and viremic controllers - data from the German NoVi Cohort

E. Wolf, J. Egert1, A. Balogi, J. Goeldi2, J. Brust1, J. Rockstroh5, J. Rockstroh5

1University of Leipzig, Germany, 2Infectious Disease Department, University Hospital Rostock, Rostock, Germany, 3Infectious Disease Department, University Hospital Rostock, Rostock, Germany, 4Infectious Disease Department, University Hospital Rostock, Rostock, Germany, 5University Hospital of Leopoldina, Halle, Germany

Background: There is no clear data on the long-term clinical outcome of viremic controllers in HIV-infected patients (policies controlling test-replication in the absence of ART (HC)). We investigated the evolution of CD4 count in HIV-controllers with undetectable or low level viremia.

Methods: Multi-centre cohort study in 151 centres: persistent viral load (VL) < 500 copies/ml (without ART (20% viral blips allowed), observation time 21.5 years (y), availability of 2.3 VL measurements < y (Kaplan-Meier (KM) analysis was used to evaluate the time to achieve a confirmed CD4 < 350/μl. A generalised estimating equations (GEE) marginal model was applied to calculate CD4-slope.
WEAA02 T-Cell Responses in HIV Infection

WEAA0201
Dendritic cells induce a broad range of MHC class I-restricted, HIV-1 epitopes in CD8+ T cells

C. Rinaldo, X.-L. Huang, Z. Fan, L. Borowski, R. Maillard, R. Day
University of Pittsburgh, Infectious Diseases and Microbiology, Pittsburgh, United States

Background: CD8+ T cell reactivity to a broad range of MHC class I Gag epitopes is central to host control of HIV-1 infection. We hypothesized that dendritic cells (DC) are required for optimal activation of memory CD8+ T cells to a broad array of MHC class I Gag epitopes.

Methods: The breadth and magnitude of memory CD8+ T cell responses to autologous DC loaded with libraries of overlapping 15mers, and 8-10mers, of Gag and Nef peptides was assessed by single cell IFNγ production (ELISPOT) and polyfunctional responses (flow cytometry) from HIV-1 infected subjects in the Multicenter AIDS Cohort Study.

Results: HIV-1 infected DC loaded with libraries of CD4+ T cell infected DC induced lower but distinct CD8+ T cell reactivity to N and C terminal variants of these Gag and Nef epitopes, suggesting degeneracy in epitope specificity reactivity. Significance: Antigen presentation by DC induces broad and robust memory CD8+ T cell responses to Gag and Nef. Conventional methods not using DC will therefore underestimate the breadth and magnitude of anti-HIV-1 T cell immunity.

Conclusions: Induction of broad and robust CD8+ T cell reactivity by antigen-presenting DC is crucial for the host control of HIV-1 infection and design of vaccines and immunotherapies.

WEAA0202
Differential recognition of HIV-1 CTL escape variants by myelomonocytic MHC class I receptors on dendritic cells and monocytes

V. Yang1, J. Huang1, M. Lichterfeld1, X. Yu2
1Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard University, Charlestown, United States, 2Infectious Disease Division, Massachusetts General Hospital, Boston, United States

Background: Due to its extraordinary genetic plasticity, HIV-1 can rapidly escape from HIV-1-specific CD8+ T cell responses through amino acid substitutions in T cell epitopes. Understanding the secrets of which are starting to be unraveled. Using the latest microarray technology coupled with a protocol to magnetically separate infected from bystander cells, we describe these interactions at an unprecedented level of detail. Furthermore, we provide the first large-scale description of alternative splicing events found in productively infected primary CD4+ T cells.

Methods: We developed a procedure to magnetically isolate productively infected versus bystander CD4+ T cells. We sequenced RNA from these cells and identified genes with alternative splicing and expression changes.

Results: We identified several genes with alternative splicing and expression changes in productively infected versus bystander CD4+ T cells. These changes included genes involved in cell proliferation, apoptosis, and immune response.

Conclusions: These findings suggest that Treg cells may still impair HIV-specific T cell responses even in the context of HAART-mediated viral suppression. On the contrary, normal levels of both Treg cells and CD31+ on naive Treg cells observed in LTNP could contribute to the better control of HIV replication in these patients.

Presenting author email: mbeaubu@gmail.com

WEAA0203
Increased thymic production of naive regulatory T-cells distinguishes patients with HAART-mediated control from those with spontaneous control of HIV

M. Ibeaubu, M. J. Tremblay
Centre Hospitalier de l'Université Laval, Centre de recherche en Infectiologie, Quebec, Canada

Background: HIV-1 is a pathogen with complex interactions with its host, the secrets of which are starting to be unraveled. Using the latest microarray technology coupled with a protocol to magnetically separate infected from bystander cells, we describe these interactions at an unprecedented level of detail. Furthermore, we provide the first large-scale description of alternative splicing events found in productively infected primary CD4+ T cells.

Methods: We developed a procedure to magnetically isolate productively infected versus bystander CD4+ T cells. We sequenced RNA from these cells and identified genes with alternative splicing and expression changes.

Results: We identified several genes with alternative splicing and expression changes in productively infected versus bystander CD4+ T cells. These changes included genes involved in cell proliferation, apoptosis, and immune response.

Conclusions: These findings suggest that Treg cells may still impair HIV-specific T cell responses even in the context of HAART-mediated viral suppression. On the contrary, normal levels of both Treg cells and CD31+ on naive Treg cells observed in LTNP could contribute to the better control of HIV replication in these patients.

Presenting author email: mbeaubu@gmail.com
Conclusions: Th17 and Th1Th17 selectively produced CCL20 and expressed gut- and lymphocytes harbored high levels of integrated HIV-DNA and their frequency was but were resistant to R5 and X4 HIV in vitro. Th17 and Th1Th17 but not Th1 Th17 and Th1Th17 expressed the HIV co-receptors CCR5 and CXCR4 and function factors specific for Th17, Th2, Th1Th17, and Th1 lineages, respectively. We AA0301 Effect of leukotrienes on HIV-1 infection in the central nervous system: monocye-derived microglial-like cells J. Bertin1,2, C. Barat1, M. Tremblay1 1Centre de Recherche du Centre Hospitalier de l’Université Laval, Centre de Recherche en Infectiologie, Québec, Canada; 2Université Laval, Biologie Médicale, Québec, Canada Background: HIV-1 enters the central nervous system (CNS) at the early stages of the infection which often leads to HIV-associated dementia (HAD). In the CNS, the microglia is the main cell type productively infected by HIV. Proinfl ammatory molecules, including leukotriene B4 (LTB4) and cysteinyl-leukotrienes (cysLTs), secreted in the CNS of infected individuals are a major cause of HAD. Moreover, the presence of leukotriene receptors has been reported in the brain. We therefore sought to investigate whether LTs could modulate HIV-1 infection of monocyte-derived microglial-like cells (MDM1).

Methods: In vitro, monocye-derived microglia-like cells (MDM1) were pre-treated with a PGR inhibitor (Ro318220) before being exposed to leukotrienes and HIV. In order to discriminate between virus entry via fusion or endocytosis, MDM1 were subsequently infected with NL4-3 (RR-R)-E-DR-R-SA (R5-tropic, pH-independent entry) or NL4.3 3 Luc R-E-DSVG (endocytosis; pH-dependent entry). To validate the effect of leukotrienes on HIV infection, we quantified by qPCR integrated and reverse-transcribed (RT) viral DNA in MDM1. Virus entry and replication were quantified by ELISA (p24) or luciferase assay (RLU). Leukotrienes receptors were quantified by flow cytometry on MDM1. Means were compared using ANOVA.

Results: Our data show that MDM1 exposed to leukotrienes are less susceptible to HIV-1 infection and consequently produce significantly lesser amounts of viral replication. More precisely, a decrease amount of proviral DNA was quantified in leukotrienes-exposed MDM1 while reverse-transcribed HIV products remained unaffected. Finally, leukotrienes were unable to alter the virus entry or replication. Moreover leukotrienes were pre-incubated with a large spectrum protein kinase C (PKC) inhibitor (Ro318220).

Conclusion: Leukotrienes negatively modulate the pH-independent entry and the early steps of the intracellular viral cycle in MDM1 in a PKC dependent manner.

WEAA0302 Systemic immune activation and duodenal CD4+ T cell depletion are associated with increased proportions of gut Enterobacteriales and Bacteroidales by 16S rRNA gene analysis in HIV infected subjects C.L. Ellis1, D.M. Asmuth2, S. Mann1,2, Z.-M. Ma1, C.-S. Li1, J. Wu1, T.H. Knight1, M. Vermeren1, A. Manrai1, R. Buyon1, D. DeRefa1, X.-D. Li1, C. Wu1, J. Alvanera1, J. Eisen2, W. Kapp2, W. Pollard3, R.-P. Sekaly1,2,3, P. Ancuta1,2,3 1Université de Montréal, Microbiologie et Immunologie, Montreal, Canada, 2University of California, Davis Medical Center, Internal Medicine, Sacramento, United States, 3Mother Veterans Administration Hospital, Internal Medicine, Mother, United States, California National HIV and AIDS, respectively.

Background: The role of intestinal bacterial antigen translocation in systemic immune activation in HIV disease is coming into focus. However, the association of the proportion of intestinal bacterial orders in HIV patients with systemic immune activation and duodenal CD4+ T cell depletion has not been examined.

Methods: ART-naive HIV-patients underwent enteroscopy (UE) before starting ART. Duodenal tissue was paraffin-embbeded for immunohistochemical analysis (IHC) and digested for T-cell subset and immune activation (CD38+/HLA-DR+) enumeration by FACS, PBMC had the same FACS analysis. Metagenomics: The biofilm was puthected by 16S rRNA-gene qPCR using validated oligo probes designed to hybridize Enterobacteriales, and Bacteroidales, respectively. Results: Twelve UE and 5 controls were studied with 10 having UE (stool samples before and after 6 months of ART (four untreated longitudinally). Mean duodenal CD4+/CD8+ count/percent is 141 cell/mm2 and 5.9% for pre-ART patients and 145 cell/mm2 and 13.1%, respectively, for post-therapy patients. PBMC CD80 activation was 49.7% at ART and 25.8% at T-cell or anti-viral therapy. There are no significant differences in the proportion of bacterial Orders comparing HIV-posi- tive to negative or comparing patients pre- and post-therapy examined as unique groups (n=6 each) or longitudinally (n=4). There is a weak trend for higher proportion of Enterobacteriales in HIV-positive patients compared to controls (0.320±0.373% vs. 0.385±0.046%, p=0.099). However, Enterobacteriales is significantly associated with low duodenal CD3+/CD8+ count by IHC regardless whether subjects are grouped as treatment-naive (n=10) or all samples are included (n=17) or all sample points (n=13) (p=0.023 and 0.013, respectively). Bacteroidales are significantly associated with CD80 activation whether subjects are grouped as treatment-naive (p=0.10) or all sample points as treatment (p=0.016) respectively.

Conclusions: The proportion of Enterobacteriales and Bacteroidales were significantly associated with duodenal tissue CD4+ T cell depletion and systemic immune activation, respectively, suggesting new immunopathogenic mechanisms in the duodenal tissues of HIV-infected patients. Presenting author email: dallas.masmuth@ucdm.ucalgavis.edu

WEAA0302 Systemic immune activation and duodenal CD4+ T cell depletion are associated with increased proportions of gut Enterobacteriales and Bacteroidales by 16S rRNA gene analysis in HIV infected subjects

WEAA0303 Antiretroviral-treated patients exhibiting a suboptimal CD4+ T cell response H. Hatano1,2, T. Hayes3, N. Sandler4, P. Hunt1,2, E. Sinclair2,5, D. Douek4, B. Shackleford5, S. Deeks1,2 1University of California San Francisco (UCSF), Medicine/Positive Health Program, San Francisco, United States, 2San Francisco General Hospital (SFGH), San Francisco, United States, 3University of California Davis, Davis, United States, 4National Institutes of Health, Bethesda, United States, 5University of California San Francisco (UCSF), San Francisco, United States

Background: A substantial proportion of HIV-infected patients treated with highly-active antiretroviral therapy (HAART) are not able to achieve a normal CD4+ T cell response despite treatment-mediated virologic suppression. These "immunologic non-responders" are at greater risk for AIDS- and non- AIDS defining events. We conducted a cross-sectional study to examine the immunologic factors associated with suboptimal CD4+ T cell response.

Methods: We studied 30 subjects exhibiting a suboptimal CD4+ T cell re- sponse (< 350 cells/mm³) despite obtaining undetectable viral loads on HAART for at least one year. Gut-associated lymphoid tissue (GALT) samples were obtained from 21/30 subjects. T cell activation (% CD38+ HLA-DR+ CD4+ and CD8+ T cells) and virus gag-specific IFN+ CD4+ and CD8+ T cell responses were measured in blood and GALT. Plasma lipopolysaccharide (LPS) levels were also measured as a marker of microbial translocation.

Results: The median duration of HIV infection was 18 years, and the median duodenal viral load suppression was 2.6 years. The median CD4+ T cell count was 323 cells/mm³ and the median CD4+ T cell count was 53 cells/mm³. There was a strong negative correlation between CD4+ T cell count and peripheral CD4+ T cell activation (rho=-0.47, p=0.009). A lower nadir CD4+ T cell count was associated with higher mucosal immune activation (% GALT CD38+ HLA-DR+ CD4+ CD8+ T cells, rho=0.50, p=0.04). Moreover, there was a trend towards a positive association between Gut-associated lymphoid tissue and peripheral immune activation levels (% GALT+ HLA-DR+ CD8+ T cells, r=0.45, p=0.06).

Conclusions: Initiating treatment later may lead to persistent mucosal immune activation, which in turn may prevent optimal CD4+ T cell gains with HAART.

Presenting author email: hhatano@php.ucsf.edu

WEAA0303 Antiretroviral-treated patients exhibiting a suboptimal CD4+ T cell response

WEAA0302 Systemic immune activation and duodenal CD4+ T cell depletion are associated with increased proportions of gut Enterobacteriales and Bacteroidales by 16S rRNA gene analysis in HIV infected subjects
WEAA0304  
Treg exert differential effects on the proliferation and differentiation of CD8 T cell subsets in chronic HIV-1 infection  

M. Nikolai1, M. Muhtarova1, M. Younas1, J.D. Lellievre1, H. Taskov1, Y. Levy1  
1National Center of Infectious and Parasitic Diseases, Immunology and Alergology, Sofia, Bulgaria, ‘Université Paris 12, CHU Henri Mondor, APHP, Inserm U955, Crete, France

Background: CD4 T memory/effector subset balance determines the effi- cient control of chronic viral infection. Regulatory CD4+CD25+FoxP3+ T cells (Treg) suppress CD8 T cells in HIV-1 infection. We have demonstrated dif- ferential Treg effects on CD8 subsets from HIV- individuals. Here we studied Treg effects on the proliferation and maturation of CD45RA/CCR7/CD27/CD45RO defined CD8 subsets in chronic HIV-1 infection.

Methods: PBMC from HIV+ subjects (n=14), CD > 350 cells/ml, plasma HIV RNA < 50 copies/ml while on ART, either Treg-depleted (magnetic sepa- ration, Miltenyi) or not, were stained with CFSE and stimulated with immobi- lized anti-CD3 (5 mk/g). CD8 T subsets were defined as CCR7+/CD45RA- (naive), CCR7+CD45RA- (central memory, CM), CCR7-CD45RA+ (effector memory, EM), CCR7-CD45RA+ (terminal effectors, TE), and CD27/CD45RO expression was studied on each subset. Proliferation rate and distribution of sub- sets were assessed in a day 5 by multicolor flow cytometry (FACScanCanto, BD).

Results: CD8 T cells had a significantly higher proliferation rate in the ab- sence of Treg (average 81% CFSE™ CD8 T vs. 72% in the presence of Treg, P < 0.05). In particular, Treg depletion increased the percentage of CFSE™+ cells within the EM/CD27+ and TE/CD27- subsets (average 74% vs. 46%, P< 0.05 and 85% vs. 48%, P< 0.01 respectively) whereas no significant effect was noted on CM pool. Polyclonal stimulation increased the percentages of CM (CCR7+/CD45RA+) and EM (CCR7-/CD45RA-) CD8 cells in comparison to non- stimulated CD8 cells (14% and 18% vs. 3%, P< 0.001; 49% and 47% vs. 23%, P< 0.001 respectively), regardless of the presence of Treg. However, in the absence of Treg the share of CD27+CD45RO- cells within the CM subset was significantly increased (average 20% vs. 13%, P< 0.01).

Conclusions: In HIV+ subjects Treg inhibit preferentially the proliferation and differentiation of effector CD8 T cells. Therefore, Treg may contribute to the dysbalance between CM and EM CD8 T cells in chronic HIV-1 infection. Presenting author email: mmikolai@hotmail.com

WEAA0305  
CD40 ligand (CD154) incorporated into HIV virions induces activation-induced cytidine deaminase (AID) expression in human B lymphocytes  

M. Epeldegui1, D. Thapa1, S. Kitchen1, J. De La Cruz1, J. Jack1, D. Martinez-Maza2
1UCALifornia Gfen School of Medicine, Microbiology, Immunology and Molecular Genetics, Los Angeles, United States, 2UCALifornia Gfen School of Medicine, Medicine, Hematology/Oncology, Los Angeles, United States, 3UCALifornia Gfen School of Medicine, UCLA AIDS Institute, Los Angeles, United States, 4UCALifornia School of Public Health, Epidemiology, Los Angeles, United States

Background: Many AIDS-associated non-Hodgkin’s lymphomas (AIDS-NHL) and in immunoglobulin class switch recombina- tion or somatic hypermutation, events that occur in germinal center B cells and require the activity of activation-induced cytidine deaminase (AID). Several oncolytic viral pathogens (EBV, HCV, HIV) can induce AID gene (AID) ex- pression, and elevated AID expression is seen prior to AIDS-NHL diagnosis. Therefore, we examined the ability of HIV to induce AID expression in human B cells.

Methods: C4DOL-positive and negative HIV, as well as HIV containing a non- functional mutant form of C4DOL (T147N), were produced by co-transfecting 293T cells with p6K-3 or p3R-CSF and pC4DOL or pT147N. Quantification of C4DOL expression in HIV preparations was obtained by magnetic bead separation using anti-C4DOL, followed by quantification of HIV p24 by ELISA, or HLA V RNA by TaqMan quantitative RNA PCR (qPCR). AID expression was assessed by qPCR. AID protein was assessed by multicolor intracellular flow cytometry.

Results: HIV produced in peripheral mononuclear cells (PBMC) induced AID expression in human B cells. HIV produced in PBMC, or from the plasma of HIV+ persons, contained C4DOL. Only virus preparations containing functional C4DOL were seen to induce AID expression, C4DOL-negative virus, or HIV containing mutant non-functional C4DOL did not. The induction of AID ex- pression was abrogated by blocking antibody to C4DOL. Exposure to C4DOL+ HIV resulted in the induction of AID protein in B cells (CD19+), with most AID+ B cells expressing C4DOL.

Conclusions: These results indicate that HIV virions that express C4DOL in- duce AID expression in B cells, via the direct interaction between C4DOL on virus particles and C4DOL on B cells. These findings are consistent with the idea that AID is induced in the direct stimulation of B cells, potentially leading to the accumulation of molecular lesions that result in the development of NHL. Presenting author email: omartinez@mednet.ucla.edu

WEAA004  
Host Restriction and Innate Immunity to HIV Infection

WEAA0401  
The role of the ubiquitin-proteasome pathway in nTRIM5a restriction of HIV-1  
C. Danielson, T. Hope

Northwestern University, Cell and Molecular Biology, Chicago, United States

Background: nTRIM5a is a restriction factor that blocks HIV-1 infection by interacting with the capsid core early after entry. Although nTRIM5a blocks accumulation of reverse transcription products, proteasome inhibitors rescue reverse transcription while maintaining a block to infection, supporting the involvement of the proteasome in the mechanism of restriction.

Methods: First, nTRIM5a was examined by immunofluorescence and char- acterized with specific ubiquitin antibodies. Next, mutations were made in nTRIM5a to prevent involvement in the ubiquitin-proteasome pathway, and mutants were analyzed by immunofluorescence, flow cytometry, and real- time PCR. A mutant virus was constructed to prevent ubiquitination of capsid, and used to infect cells expressing nTRIM5a to characterize restriction and reverse transcription. Finally, a fluorescently tagged subunit of the protea- some, LMP-2GF, was coexpressed with nTRIM5a and analyzed by fixed and live cell microscopy.

Results: Staining with specific ubiquitin antibodies revealed that nTRIM5a cytoplasmic bodies contained polyubiquitinated proteins, but proteasome inhibitors decreased polyubiquitinated proteins within cytoplasmic bodies. nTRIM5a mutants showed reduced restriction of HIV-1, and localized to cy-toplasmic bodies with different patterns. Analysis of fluorescently tagged protea- somes in cells expressing nTRIM5a showed that proteasomes were recruited to nTRIM5a cytoplasmic bodies in the presence of virus, and live cell microscopy revealed interactions between virus and proteasomes.

Conclusions: The relocalization of polyubiquitinated proteins upon protea- some inhibition may indicate an afflux of polyubiquitinated proteins, implicat- ing cytoplasmic bodies in the process of ubiquitination. Analysis of nTRIM5a mutants revealed that nTRIM5a may play a partial role in conjugating and receiving ubiquitination. The mutant virus showed that ubiquitination of capsid is not required for nTRIM5a restriction, but reverse transcription is affected. Finally, proteasomes are recruited to nTRIM5a cytoplasmic bod- ies in the presence of virus, which may lead to proteasomal destruction of nTRIM5a-virus complexes. Presenting author email: c-danielson@northwestern.edu

WEAA0402  
Analysis of TRIM5α mRNA polymorphisms and characterization of a novel TRIM5α variant found in HIV-1 long-term non-progressors  
R. Hartjen1, N. Jensen1, S. Freki1, J. Schulte zur Wiesch1, J. Hauber1, J. van Lunzen1
1University Medical Centre Hamburg-Eppendorf, HIV Research Laboratory, Hamburg, Germany, 2*Heinrich-Heitte-Institute, Dept for Cell Biology and Virology, Hamburg, Germany

Background: The tripartite motif protein TRIM5α from rhesus monkeys is a cytoplasmic restriction factor against HIV-1. Although TRIM5α is not active against HIV-1, its restriction potential can be signifi- cantly increased by c) HIV-1 negative individuals as normal controls. Selected TRIM5α-variants may play a role in the delayed disease progression of HIV-1. The role of the ubiquitin-proteasome pathway in nTRIM5a restriction of HIV-1.

Methods: TRIM5α cDNA from a subset of either of the following groups was isolated and sequenced: a) LTNP or “slow progressors”, who maintain a virus load < 2000 copies/ml and CD4 counts of > 500 cells/µl without any treatment for up to 10 years; b) patients in various stages of progressive dis- ease and c) HIV-1 negative individuals as normal controls. Selected TRIM5α-sequences were subcloned into a retroviral vector for functional studies in mammalian cells.

Results: 8 mutations were found in TRIM5α-cDNAs from the study group, of which 3 have previously been described by other authors. Interestingly, sequencing of the TRIM5α mRNA revealed a novel 100 bp (767-867) deletion-variant in the LTNP group, occurring in 3 of the 10 LTNP individuals but only in one seronegative control and in none of the individuals with progressive disease. Interestingly, this TRIM5α mutant (Δ767-867), which is unrelated to known mutations in the SPRY region, has not been described in studies investigating genomic DNA. In an infection assay employing stably transfected canine C117 cells and VSV-G-pseudotyped HIV-1-GFP particles, the TRIM5α(Δ767-867) variant clearly reduced the rate of HIV-1 infection.

Conclusions: TRIM5α(Δ767-867) may confer a protective effect against HIV- 1 infection potentially representing a cellular factor that affects the delayed disease progression in LTNP patients. Presenting author email: v.lunzen@uke.de
WEAA0403
Tetherin restricts direct cell-cell viral transfer and transmission of HIV-1
B. Kuhl, R. Sloan, D. Donahue, T. Bar-Magen, C. Liang, M. Wainberg
McGill University AIDS Center, Montreal, Canada

Background: Tetherin (BST-2/CD317/HM1.24) is an interferon (IFN)-inducible factor of the innate immune system, recently shown to exert antiviral activity against HIV-1 and other enveloped viruses by tethering nascent viral particles to the cell surface, thereby inhibiting viral release. In HIV-1 infection, the viral protein U (Vpu) counteracts this antiviral action by down-modulating tetherin from the cell surface. Viral transmission between T-cells can occur via cell-free transmission or the more efficient direct cell-cell route through virological synapses. Virological synapses are associated with lipid rafts rich microdomains in the membrane. Tetherin is known to localize to these micro-domains and is capable of modulating actin architecture, which is crucial for viral entry and budding.

Methods: We established a flow cytometry-based co-culture assay to distinguish viral transfer from viral transmission and investigated the impact of tetherin on cell-cell spread of HIV-1. Sup-T1 cells inducible for tetherin expression were used to examine the impact of effector and target cell tetherin expression on viral transfer.

Results: We show that tetherin, in addition to inhibiting viral release, also inhibits direct cell-cell virus transfer and transmission. Viral Vpu promotes viral transmission by tethering-expressing cells by down-modulating tetherin from the effector cell surface, outweighing its possible cost of fitness in cell-cell spread. Our data further suggest that tetherin in the target cell promotes viral transfer and transmission in a manner that favors vpu-deficient isolates.

Conclusions: These results suggest a role for tetherin in cell-cell contacts, specifically at virological synapses. Our data further contribute to the body of knowledge that the targeting of Vpu could be a viable strategy aimed at blocking HIV replication.

Presenting author email: bkuhl@mail.mcgill.ca

WEAA0404
IL-10 promoter genetic variants affect IL-10 plasma levels, breadth of cytotoxic T-cell lymphocyte response and the rate of CD4 T-cell decline and HIV-1 transmission
D.D. Naikey1, B. Wang2, E. Losina1, J. Zupkowsky1, H. Hanno3, S. Reddy2, R. Bishop1, C. Chong1, P.R.oulder4, B.D. Walker5,6, D.E. Kaufmann5,7, T. Ndung’u1
1University of KwaZulu-Natal, Hasslo Plattner Research Program, Durban, South Africa, 2Program in HIV Outcomes Research, Massachusetts General Hospital, Boston, United States, 3Ragon Institute of Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard University, Boston, United States, 4Institute for Pathogenesis and Therapy, Nuffield Department of Pathology, Oxford, United Kingdom, 5Howard Hughes Medical Institute, Chevy Chase, United States, 6Harvard Medical School, Boston, United States

Background: Interleukin-10 (IL-10) is a powerful immunoregulatory cytokine. Genetic polymorphisms in the IL-10 gene promoter have previously been shown to affect susceptibility to HIV-1 infection and the rate of disease progression. However, the mechanisms underlying these genetic effects are poorly understood. Here we investigated the relationship between IL-10 promoter variants, plasma IL-10 levels, the breadth and magnitude of HIV-1-specific cytotoxic T lymphocyte (CTL) immune response and markers of disease outcome in patients chronically infected with HIV-1.

Methods: We used Taqman assays to genotype two IL-10 promoter single nucleotide polymorphisms (SNPs) in 451 antiretroviral naïve individuals chronically infected with HIV-1. Plasma IL-10 levels were measured at baseline using luminex technology for 66 individuals. Plasma viral load, CD4 cell counts and HIV-1-specific IFN-γ ELISpots were performed at baseline. Three hundred individuals were followed longitudinally and the rate of CD4 count decrease measured over a median of 25 months of follow-up.

Results: The allele frequencies for the -1082G and -592A variants were 0.31 and 0.34 respectively. IL-10 levels were significantly lower in the combined A/A/A than in the GC/GC combined genotype (p=0.0157, Wilcoxon rank sum test). There was no significant correlation between the SNPs and baseline viral load or CD4 counts. The low IL-10-producing 592AA genotype significantly correlated with higher breadth of IFN-γ CTL responses (p=0.0332, Mann Whitney test). There was a significant correlation between the rate of CD4 decline and IL-10-1082G genotype (p=0.048, log-rank test). We observed a significant change in CD4 cells per year.

Conclusions: IL-10 promoter variants correlate with IL-10 plasma levels and the rate of CD4 T cell decline during chronic HIV-1 infection. IL-10 promoter variants may influence the rate of HIV-1 disease progression by regulating plasma IL-10 and HDL-cholesterol levels which in turn may affect the breadth of IL-10-specific CD8 responses.

Presenting author email: dnhanta.naikey@ukzn.ac.za

WEAA0405
Changes in CD4+ cells miRNA expression following exposure to HIV-1
F. Bignami1, E. Piloti1, L. Bertocellil, P. Ronzi1, M. Gulli1, N. Marmiroli1, G. Magnani1, M. Piriz1, C. Musini1, L. Lopaco1, R. Ruotolo1, M. Galli1, A. Cossalter3, C. Cassi2
1Università degli Studi di Milano, Dipartimento di Scienze Cliniche, Milano, Italy, 2University of Modena and Reggio Emilia, Dipartimento di Scienze Biomediche, Modena, Italy, 3Università degli Studi di Perugia, Dipartimento di Scienze della Salute, Perugia, Italy

Background: miRNAs inhibit HIV-1 expression by either modulating host innate immunity or by directly interfering with viral miRNAs. Here, we investigated the miRNA profile that discriminates different classes of HIV-1 infected patients from multiple exposed uninfected individuals.

Methods: The expression levels of 377 miRNAs were selectively analyzed in CD4+ cells isolated from whole blood of HIV-1 elite LTNP (ELTNP), naive, and multiply exposed uninfected individuals (MEU). MEU extraction was performed by the mirVana™ miRNA Isolation Kit (Ambion) and their expression subsequently examined by real-time PCR-based arrays. The expression of miRNAs was also determined in primary culture of CD4+ T cells and monocytic-macrophages infected in vitro by R5 strains. Expression of Dio-2 and Dors-2 was evaluated by real-time PCR.

Results: We only considered miRNAs that were expressed in the 70% of patients of at least one class and varied by at least 1 log, from healthy controls. Out of 377 miRNAs, 26 were up-regulated, while 88 were down-regulated. Statistical analysis showed that 21 miRNAs significantly differentiated ELTNP from MEU and 23 miRNAs distinguished naive from MEU, while only 1 (miR-155) discriminated ELTNP from naive. By hierarchical clustering of the miRNAs according to patient class, elTNP clustered with naive whereas all MEU subjects were grouped together. The Dio-2 and Dors-2 expression in the patient classes correlated with miRNA profile changes. Among miRNAs differentially expressed in patient classes, 32 were detected in vitro infection model: the most of the up-regulated miRNAs were expressed in monocytic-macrophages, whereas the most of the down-regulated miRNAs were expressed in T lymphocytes.

Conclusions: These findings support that miRNA profile could be the result not only of a productive infection, but also of the exposure to HIV products that leave a signature in immune cells. These data provide some intriguing issues relative to the development of HIV vaccines targeting viral proteins.

Presenting author email: claudio.cassil@gmail.com

WEAB01 Malignancies in PLHIV

WEAB01
The burden of cancer among HIV-infected persons in the U.S. population
M. Shiel1, R. Pelfer1, M. Galli1, I. Hall1, J. Lu2, A. Chaturvedi1, K. Bhatia3, T. Uldrick4, R. Yardham3, J. Goedert4, E. Engels5
1National Cancer Institute, Rockville, United States, 2Center for Disease Control and Prevention, Atlanta, United States

Background: Antiretroviral therapy has improved survival among HIV-infected persons, decreased incidence of AIDS-defining cancers, and increased the at-risk population for non-AIDS-defining cancers. We estimated the number of cancers occurring over time in the U.S. HIV population.

Methods: CDC collects data on all U.S. HIV cases. Cancer incidence rates were obtained through linkage of HIV and cancer registries in 15 U.S. areas. For persons with AIDS, cancer counts were estimated for 1991-2005 by applying cancer incidence rates to the U.S. AIDS population by year, age, sex, race/ethnicity, transmission category, and time since AIDS. For persons with HIV-only (not AIDS), counts were estimated for 2004-2007 by applying overall cancer rates for 1998-2005 to HIV data from 34 states with confidential name-based HIV reporting since 2004.


Conclusions: Dramatic increases in non-AIDS-defining cancers among persons with AIDS are driven by growth and aging of the AIDS population, and rising incidence rates for some cancers. Cancer prevention and treatment in HIV-infected persons are increasingly important.

Presenting author email: claudio.cassil@gmail.com

21
WEAB0102
AIDS-related malignancies in teenagers horizontally infected with HIV-1 during infancy

A. Cupina1, E. Dumitrescu1, I. Niculescu1, L. Giubelain1, A.C. Stoian1, A. Romanescu1, C. Toci1
1University of Medicine and Pharmacy, Infectious Diseases, Craiova, Romania, 2"Victor Babes” Clinical Hospital of Infectious Diseases and Pneumology, Craiova, Romania

Background: to assess the spectrum, prevalence and evolution of AIDS-relat- ed malignancies in teenagers horizontally infected with HIV-1 during their infancy.

Methods: retrospective study, from 01.01.2000 to 31.12.2009, on a cu- mulative group of 594 teenagers (according to Tanner classification), born and horizontally infected with HIV-1 (mainly nosocomial) between 1988 and 1990, followed up by Regional center for Evaluation and Monitoring of HIV-1 Infection, Craiova, Romania. Patients (Px) were clinically, biologically and imaging evaluated; diagnosis of certainty has been histopathologically established.

Results: 21 Px (3.5%) have been diagnosed with AIDS-associated malignan- cies, with a gender ratio M/F = 14/7 (66.7% / 33.3%). The spectrum and prevalence of malignancies: 9 Px (42.9%) - non-Hodgkin malignant lymphopa- mia (NHL), 2 Px (9.5%) - brain lymphoma, 2 Px (9.5%) - Burkitt lymphoma, 8 Px (38.1%) - Kaposi sarcoma. The average time between diagnosis of HIV infection and identifying neoplasia has been 6.3 (0.5, 15) years. At the malign- ancy diagnosis: average CD4 count =116.6 [9, 267]cells/mm3; average VL=4.45 log10 [3.89; 4.81]copies/mL; 11 Px (52.4%) were antiretroviral mul- ti-experienced, 4 other Px [19%] were naïve (neoplasia was the HIV infection primer). All Px received ART; chemotherapy courses have been introduced in Px diagnosed with lymphoma. Evolution: 12 deaths have been recorded [57.2%] - 11 Px with lymphoma , one case of Kaposi sarcoma (also having concurrent pulmonary tuberculosis) with an average survival time after diagnosis of 5 [1; 8] months; 2 Px [9.5%] with NHL demonstrate remis- sions [53%] - 1Px Kaposi sarcoma, treated only with ARV, were still alive after a average of 5.4 [1; 9] years of follow-up.

Conclusions: HIV-1 positive teenagers horizontally infected during infancy, AIDS-related malignancies have a relatively low prevalence, but, when present, they are accompanied by an increased mortality in spite of appropriate diagnosis and treatment.

Presenting author email: dumitrescu_florentina@yahoo.com

WEAB0103
Lack of regression of anal squamous intraepithelial lesions and anal HPV infection despite immune restoration under cART

C. Piketty1, A. Si-Mohamed1, E. Lanoy2, B. Cochand-Priollet3, S. Trabelsi2, P.-M. Girard4, R. Tubiana1, A. Abramovitz1, E. Tartour1, L. Weiss1, D. Costagliola5, and the Valparaiso Study Group

Background: A high prevalence of anal squamous intraepithelial lesions (ASIL) and HPV infection have been observed in HIV-infected MSM in the pre-cART era. To date, the impact of cART on the natural history of HPV infection and ASIL is poorly documented.

Methods: 94 HIV-infected MSM naive of cART were enrolled in a longitudinal study before starting a first line regimen of cART. Each patient provided anal samples for cytology, luminal HPV and HPV DNA testing at baseline, and months 12 and 24 of cART. HPV DNA was detected by real time PCR and the Roche Linear Array assay. Anal cytology was processed by the Thin Prep method (Hologic). CD4+ and CD8+ T cells responses to HPV-16 E6 and E7 proteins were measured in a subgroup of individuals exhibiting HPV-16 anal infection at inclusion.

Results: The median age of the patients was 39.7 years (33.2 - 43.5). Baseline and month 12 results are presented in the Table 1:

<table>
<thead>
<tr>
<th>CD4 cells/mL</th>
<th>Plasma Logistic Regression Coeff (95% CI)</th>
<th>Plasma Logistic Regression Coeff (95% CI)</th>
<th>Plasma Logistic Regression Coeff (95% CI)</th>
<th>Plasma Logistic Regression Coeff (95% CI)</th>
<th>Plasma Logistic Regression Coeff (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4 cells/mL</td>
<td>299 (242 - 342)</td>
<td>4.8 (4.17 - 5.26)</td>
<td>1%</td>
<td>51 (54%)</td>
<td>30 (32%)</td>
</tr>
<tr>
<td>Plasma log10</td>
<td>VL &lt;50</td>
<td>83 (90%)</td>
<td>49 (53%)</td>
<td>5 (2 - 7)</td>
<td>51 (54%)</td>
</tr>
<tr>
<td>Low grade SIL</td>
<td>30 (32%)</td>
<td>83 (90%)</td>
<td>49 (53%)</td>
<td>5 (2 - 7)</td>
<td>51 (54%)</td>
</tr>
<tr>
<td>High risk</td>
<td>51 (54%)</td>
<td>83 (90%)</td>
<td>49 (53%)</td>
<td>5 (2 - 7)</td>
<td>51 (54%)</td>
</tr>
<tr>
<td>anallymphoma</td>
<td>51 (54%)</td>
<td>83 (90%)</td>
<td>49 (53%)</td>
<td>5 (2 - 7)</td>
<td>51 (54%)</td>
</tr>
<tr>
<td>Baseline</td>
<td>51 (54%)</td>
<td>83 (90%)</td>
<td>49 (53%)</td>
<td>5 (2 - 7)</td>
<td>51 (54%)</td>
</tr>
<tr>
<td>Month 12</td>
<td>41 (58%)</td>
<td>59 (87%)</td>
<td>28 (41%)</td>
<td>5 (2 - 6)</td>
<td>51 (54%)</td>
</tr>
</tbody>
</table>

Lack of regression of anal ASIL and HPV infection despite immune restoration under cART.

Prevalence of HPV infection, low and high grade SIL were similar at baseline and M12. Among patients with normal cytology and/or histology at baseline, 44% progressed to ASIL at M12 whereas 31% of patients with ASIL at base- line exhibited a regression at M12. Specific anti-HPV CD T cell responses were mostly undetectable both at baseline and M12.

Conclusion: Our results demonstrate a high prevalence and incidence of ASIL and anal HPV infection in HIV-infected MSM despite cART reconstitution under ART. These data suggest that all HIV-positive MSM remain at risk of anal SIL despite immune restoration.

Presenting author email: christophe.piketty@ego.aphp.fr

WEAB0104
CD4 count trajectories of HIV-infected women in North America with cervical cancer after initiating antiretroviral therapy

A.G. Abraham1, S. Gange1, Y. Jing1, R. Bosch2, J.T. Brooks3, R. Dubrow4, T. Ernott1, K. Gebert1, M.J. Gill1, H. Hessel1, M. Khanna5, K. Koster6, R. Moore7, S. Rourke8, M. Silverberg9, G. D’Souza10, North American AIDS Cohort Collaboration on Research and Design
1Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, United States, 2Harvard University, Boston, United States, 3Centers for Disease Control and Prevention, Atlanta, United States, 4Yale University School of Medicine, New Haven, United States, 5University of North Carolina, Chapel Hill, United States, 6Johns Hopkins School of Medicine, Baltimore, United States, 7University of Calgary, Canada, 8University of California at San Francisco, San Francisco, United States, 9BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 10University of Washington, Seattle, United States, 11McGill University, Montreal, Canada, 12University of Toronto, Toronto, Canada, 13Kaiser Permanente Northern California, Oakland, United States

Background: Immunosuppression resulting from HIV-infection has been hypothesized to promote progression to cervical cancer. Few studies have had sufficient cancer numbers to examine patterns of immune deficiency in relation to invasive cervical cancer (ICC) incidence. We focused on ICC following antiretroviral therapy (ART) initiation.

Methods: Using data from the NA-ACCORD HIV cohort collaboration of iEDEA, thirteen cohorts with clinically confirmed or cancer registry-linked data on ICC were included. Analysis was limited to women who initiated ART during follow-up. Cases were matched at the time of ART initiation (prior to ICC) to controls by CD4 cell count, age, calendar period, cohort and opportunity for ICC (minimum length of follow-up). All appropriate matches were used. In the trend in the mean CD4 count at 4 years of ART initiation and matched ICC cases during the follow-up period (starting four years prior to ART initiation) were compared using a piecewise-linear mixed effects model with spline knots at 0, 4, and 8 years.

Results: We identified 56 cases of ICC following ART initiation and matched to 590 controls. At ART initiation, the mean CD4 count of all matched samples was 269 cells/mm3. Four years post-Art among cases was 174 cells lower than controls (p=0.02). A year following ART initiation, the average CD4 cell count was 72 cells lower in cases than controls (p=0.04). The mean CD4 counts of controls increased an average of 8 cells/ month more in the year following ART than that of the cases (p<0.01).

Conclusions: In this large North American cohort collaboration, the average CD4 count of treated HIV-infected women diagnosed with ICC was significantly lower than that of comparable HIV-infected women before and after ART initiation, suggesting that poor immune status and a poorer response to ART may contribute to ICC incidence in HIV-positive women.

Presenting author email: aabraham@jhsph.edu
Conclusion: Many NADC occur at an increased rate compared to the general population and at an earlier age. This finding may impact screening practices in HIV-positive individuals.

Presenting author email: mnguye3@emory.edu

WEAB0202 Antiretroviral Resistance: Clinical Implications of Drug Resistance for People Living with HIV

V. Jain1, E. Vittinghoff2, F. Hecht3, S. Deeks1
University of California San Francisco (UCSF), San Francisco, United States, 1University of California San Francisco (UCSF), San Francisco, United States, 2University of California San Francisco (UCSF), Department of Epidemiology and Biostatistics, San Francisco, United States

Background: Drug resistance mutations are often associated with reduced fitness in vitro. The in vivo consequences of these mutations are not certain. We evaluated the impact of transmitted drug resistance (TDR) on viral load (VL) and adherence over time in patients naive to antiretroviral therapy (ART).

Methods: Genotypic resistance measurements were performed at baseline on a large cohort of individuals identified during acute/early infection (UCSF Options cohort). We used linear mixed models with cubic splines to compare secular patterns in log(VL) and square root CD4 (sqrtCD4) in those with and without transmitted drug resistance, censoring data upon ART initiation. In addition, average log(VL) and sqrtCD4 levels were compared during set points (6 months to 2 years).

Results: Of 556 individuals with genotypic data available, 104 (19%) had transmitted drug resistance. Approximately 65 days after the estimated infection date, VL was higher in WT than in TDR (0.38 log, p = 0.001), as well as in subgroups with NRTI (0.52 log, p = 0.001) and PI (0.56 log, p = 0.001) resistance. Individuals with NNRTI resistance had a trend suggesting higher VL (0.27 log, p = 0.11). These differences in VL were sustained; VL was not significantly different between groups at 180 and 360 days. There were no differences in CD4 cell counts, either after early infection or during set point.

Conclusions: Patients with transmitted NRTI and PI, but not NNRTI, resistance mutations have lower viral loads during the acute phase of infection; this effect, however, is not sustained. These data provide evidence that drug resistance mutations have an in vivo impact on viral fitness. The waning of the differences in viral load over time suggests that further viral evolution likely attenuates the impact of drug resistance mutations, either through reversion of mutations to wild-type, or through other genetic changes that compensate for fitness costs.

Presenting author email: vivek.jain@ucsf.edu

WEAB0203 Suboptimal adherence associated with virologic failure and HIV drug resistance mutations among patients on 1st line HAART in Bangalore, India

M. Ekstrand1,2,3, A. Shet2, S. Chandy2, G. Singh2, R. Shamsundar2, V. Madhavan2, S. Saravanan2, N. Kumarasamy2
University of California, San Francisco, Medicine, San Francisco, United States, 1St John’s Research Institute, Bangalore, India, 2University of California, San Francisco, School of Public Health, San Francisco, United States, 3St John’s National Academy of Health Sciences, Pediatrics, Biotechnology, Bangalore, India, 4St John’s National Academy of Health Sciences, Microbiology, Bangalore, India, 5YRCARE, Chennai, India

Background: This study was conducted to examine the relationship between adherence, viral load (VL) and resistance mutations among public and private clinic outpatients receiving first-line HAART in Bangalore, India.

Methods: We recruited a cohort of 552 outpatients receiving HAART. Viral load testing was conducted for all study participants. HIV-1 genotypic resistance testing was performed for n=92 with VL>1,000 copies/mL. Interpretation of drug resistance mutations was performed according to the Stanford database (http://hivdb.stanford.edu/hiv/). Past month adherence and treatment interruptions within 48 hours were assessed in a self-report.

Results: 6% (n=34) of participants reported < 95% past month adherence and 20% (n=110) reported a history of ≥48 hr treatment interruptions. Combining the two adherence measures, 23% (n=123) were classified as “sub-optimally-adherent”.

Overall, 24% (n=112) had detectable VL (median =8,850 c/mL, IQR 1,175-147,688 c/mL). All adherence measures were significantly associated with VL: 42% suboptimally-adherent, and 19% of optimally-adherent patients showing virologic failure (p < 0.001).

Among the 92 samples with VL>1,000, 69% (n=63) had 1+ NRTI mutations, while 62%, 69% and 44% (n=40) having thymidine analogue mutations (TAMs). 72% (n=66) had 1+ NNRTI mutations and 23% (n=21) had 1+ NVP resistance mutations. Adherence was significantly associated (p =0.02) with mutations when treatment interruptions were included, with 87% of “suboptimally-adherent” patients having at least one mutation.

Conclusions: The suboptimal adherence, treatment failure and worsening drug resistance among patients on first-line HAART in India. The predictive value of standard adherence measures was improved by including data on treatment interruptions. The observed mutations can jeopardize future treatment options, especially in light of limited access to 2nd line treatments. Research is needed to examine individual, family and structural reasons for treatment interruptions. Culturally-appropriate techniques are needed to improve both types of adherence in this setting.

Presenting author email: mekstrand@gmail.com

WEAB0204 Dose-response curve slope is a missing dimension in the analysis of HIV-1 drug resistance

H. Samphie1, L. Shen2, R. Siciliano3
1Johns Hopkins University School of Medicine, Medicine, Baltimore, United States, 2Johns Hopkins University School of Medicine, Pharmacology, Baltimore, United States, 3Howard Hughes Medical Institute, Baltimore, United States

Background: Treatment with highly active antiretroviral therapy (HAART) has reduced morbidity and mortality in HIV-1 infected patients. However, drug resistance is a barrier that prevents therapy from being effective. Using a single round infectivity assay, we have previously shown that the dose response curves of different HIV drugs have slope (m) values that are characteristic of the drug class to which they belong.

Methods: We examined how slope is altered in virus clones that bear drug resistance mutations. Dose response curves were generated to characterize the behavior of virus bearing single mutations in reverse transcriptase (RT), protease (PR), nef, and integrase. We compared the instantaneous inhibitory potential (IIP) of antiretroviral drugs against wild-type and resistant virus. This measure indicates the number of logs of inhibition of infectivity that a drug can achieve in a single round of viral replication. The replicative capacity of virus was also analyzed to determine the selective advantage of drug resistance strains over wild-type.

Results: From our analysis, we find that drug resistant viruses differ from wild-type not only in terms of IC50 changes, but also with respect to slope values. Furthermore, drugs from different classes behave differently with respect to shifts in IC50, and slope when resistant mutations are introduced into their corresponding targets. As expected, 1IPs of HIV drugs were induced by known resistant mutations due to increases in IC50, decreases in slope, or both. Finally, measurements of selective advantage and residual IIP predicted selection and evolutionary pathways of drug resistant variants.

Conclusions: We propose that slope is a previously ignored parameter that is essential for proper interpretation of phenotypic resistance test results. The concepts that emerge from this study are indispensable in the analysis of multiple resistant clinical cases, where salvage regimens could be selected for patients based on residual IIP values.

Presenting author email: msamphie@jhmi.edu

WEAB0205 Monitoring the emergence of resistance mutations in patients under salvage therapy with Raltegravir in Rio de Janeiro, Brazil: a six month follow-up

C.P.B. Passaes1, M.L. Guimarães2, S.W. Cardoso3, V. Veloso4, B. Grinsztejn5, R.G. Morgado6
1Oswaldo Cruz Foundation-FIOCRUZ, Laboratory of AIDS and Molecular Immunology, Rio de Janeiro, Brazil, 2Oswaldo Cruz Foundation-FIOCRUZ, Evandro Chagas Clinical Research Institute of Rio de Janeiro, Brazil

Background: Raltegravir (RAL) was approved to be used in salvage therapy in Brazil in 2009. The aim of this work is to monitor the clinical parameters and the emergence of resistance mutations in the first four patients receiving a drug regimen containing RAL in the IPEC, in Rio de Janeiro, Brazil.

Methods: Samples were analyzed at baseline (T0), two (T1) and four (T4) months after initiating the therapy with RAL. CD4 and CD8 cells were measured by flow cytometry and viral load (VL) by the DQNDA method. Plasma and blood samples were used to RNA and DNA extraction. The integrate genotyping was performed by an in house nested PCR, and samples were automatically sequenced. The analysis of resistance was performed based on the Stanford algorithm.

Results: After initiating RAL therapy, a modest, but consistent immune reconstitution was observed for all patients. VL levels greatly decreased for most patients, however, for two of them a rebound to higher levels (2 and 3 log10) was observed at T2. RNA analysis evidenced the occurrence of virologic failure (G140S/Q148H) at T2 for one of the patients showing VL increase. In order to investigate if resistance mutations could be detectable in proviral DNA before their emergence in the plasma RNA, a total of 99 clones were analyzed from all visits. No major resistance mutations were detected in proviral samples, even in the sample presenting major resistance mutations. Some minor resistance mutations were observed in the DNA analysis: L74M;Q146H;Q148H;Q95K;E138Q;M154I;G163R;S230N and R263K.

Conclusions: These results describe a case of early virological failure to RAL (four months). Major resistance mutations were not detected in the provirus. In spite of the emergence of resistant virus in 1 of the 4 individuals analyzed, RAL showed a good potential in suppress HIV VL and is a good option in the clinical management.

Presenting author email: cppassaes@ioc.focruz.br
WEAB0301

The incidence of intracranial hemorrhage in HIV-infected patients: a case-control study nested in the RAMQ database cohort

M. Durand1, G. Sheehy2, J. Leloir1, C.L. Tremblay1, G. Wener1, T. Leclerc1, J. Tremblay1, 1Conseil de Recherche de l’UHRESS du CHUM, Paris, France, 2Hôpital Tenon, Maladies Infectieuses, Paris, France, 3Hôpital Tenon, Paris, France, 4Fondation Rothschild, Neurology, Paris, France

Background: Both HIV infection and use of some antiretrovirals have been associated with intracranial hemorrhage (ICH). We performed a nested case-control study to determine whether HIV infection or exposition to different antiretrovirals was associated with increased risk of ICH.

Methods: We selected all HIV+ patients present in the RAMQ database from 1985 to 2007 (defined as ICD-9 codes 042.0-044.9 and Quebec code 795.8). Each HIV+ patient was matched (for sex, age and follow-up dates) with four HIV- patients. We used a Poisson regression model to calculate the rates of ICH (defined as ICD-9 codes 430.x, 431.x and 432.x) according to HIV status. We conducted a case-control study nested within the cohort of HIV+ patients to look at the effect of anti-retrovirals. Cases were defined as ICH happening in an HIV+ patient. Up to 10 HV+ controls were selected for each case (matched for age, sex and follow-up dates). Adjusted odds ratios for ICH given antiretroviral exposure were obtained using conditional logistic regressions stratifying for use of antihypertensive, antiplatelet, anti-inflammatory or anticoagulant drugs.

Results: A total of 7163 HIV+ and 27 681 HIV- patients were included into the study with a total follow-up time of 138 448 person-years. There were a total of 58 ICH, 29 in HIV+ and 21 in HIV- patients. Hazard ratio for ICH in HIV+ patients compared to HIV- was 3.90 [95%CI [2.89-5.14]]. In the case-control study, 29 cases of ICH in HIV+ individuals were matched to 228 HIV+ controls. Anti-retroviral exposure was not associated with an increased risk of ICH (odds ratio 2.71 [95%CI [0.82-8.96]). None of the antiretroviral classes were associated with increased OR of ICH.

Conclusions: Even in the post HAART era, HIV infection remains a significant risk factor for ICH. However, no association was found between use of antiretrovirals and ICH. Presenting author email: madeleine.durand@gmail.com

WEAB0302

Glomerular lesions in HIV-1-infected patients: evolution from 1996 to 2007, on 88 consecutive renal biopsies

C. Flateau1, F.-X. Lesure1, E. Plaisier2, P. Callard2, J. Pacanowski3, C. Amiel2, F.-X. Lescure2, E. Plaisier2, P. Callard2, J. Pacanowski3, 1Hôpital Tenon, Maladies Infectieuses, Paris, France, 2Hôpital Tenon, Paris, France, 3Hôpital Saint Antoine, Paris, France

Background: Since the generalization of highly-active antiretroviral therapy (HAART), a decrease of HIV-associated nephropathy (HIVAN) - classically associated with severe immunosuppression has been observed - and a relative increase of other types of glomerulopathies has been reported on small series of renal biopsies.

Methods: We reviewed all the consecutive renal biopsies from HIV-infected patients during 10 years following the introduction of HAART. 88 biopsies were included.

Results: Among 101 patients with glomerular lesions, 88 had available data. Mean glomerular filtration rate (GFR) was 43 ml/mn/1.73 m²,

Conclusion: The prevalence of neuro-cognitive disorders in HIV patients on HAART is controversial. Moreover, new neurological complications seem to emerge in this patients population, of which the pathogenesis is poorly understood.

Methods: Retrospective study between 1999 and 2008.

Results: We report a new type of encephalitis in 14 HIV infected patients (BM/6F, median age 41 years, 8 of African origin, 2 North African, 4 Caucasian, median duration of HIV infection 10 years, 64% had AIDS, 86% on HAART, median CD4 354/mm3, median viral load 1300/ml). The patients presented with acute or subacute symptoms of headache, confusion, convulsion, motor deficit and dementia. It mainly occurred in patients during immune reconstitution or HAART interruption or banal viral infection. MR scanning demonstrated leukopathy with peri-vascular hyper-intense T2 weighted lesions. CSF showed lymphocytosis with nearly exclusively CD4+ cells. In 10 patients a brain biopsy was performed, and we found lesions characterised by edema, astrocytic and microglial activation and peri-vascular and intra-parenchymalous CD8 infiltration. In half of the cases, HIV p24 protein was expressed. Patients quickly improved with steroids (mainly introduced with HAART intensification). Relapse rate was 36%. After a median of 4 years follow-up, 5 patients had died (2 due to encephalitis, due to its complications) and 4 had sequela. Only 36% of patients were without any sequelae.

Conclusions: This is the first description of a new type of encephalitis in HIV patients characterised by severe neurological symptoms and homogeneous microscopic and radiological findings. The encephalitis is triggered by cytotoxic CD8, but the mechanisms of the disease is otherwise poorly explained.

Presenting author email: xavier.lescure@tnn.aphp.fr

WEAB0303

Lymphocytes T8 infiltrative encephalitis: a new form of neurological complication in HIV infection

F.-X. Lesure1, C. Amiel2, F. Gray3, J. Savatovsky4, J. Pacanowski3, J-M. Molina2, G. Pliaux2, A. Moullignet2, 1APHP Hospital Tenon, Infectious Diseases Unit, Paris, France, 2APHP Hospital Tenon, Laboratory of Virology, Paris, France, 3APHP Hospital La Borde, Anatomopathology Laboratory, Paris, France, 4Fondation Rothschild, Radiology, Paris, France, 5APHP Hospital Saint Antoine, Infectious Diseases Unit, Paris, France

Background: The prevalence of neurocognitive disorders in HIV patients on HAART is controversial. Moreover, new neurological complications seem to emerge in this population of patients, of which the pathogenesis is poorly understood.

Methods: Retrospective study between 1999 and 2008.

Results: We report a new type of encephalitis in 14 HIV infected patients (BM/6F, median age 41 years, 8 of African origin, 2 North African, 4 Caucasian, median duration of HIV infection 10 years, 64% had AIDS, 86% on HAART, median CD4 354/mm3, median viral load 1300/ml). The patients presented with acute or subacute symptoms of headache, confusion, convulsion, motor deficit and dementia. It mainly occurred in patients during immune reconstitution or HAART interruption or banal viral infection. MR scanning demonstrated leukopathy with peri-vascular hyper-intense T2 weighted lesions. CSF showed lymphocytosis with nearly exclusively CD4+ cells. In 10 patients a brain biopsy was performed, and we found lesions characterised by edema, astrocytic and microglial activation and peri-vascular and intra-parenchymalous CD8 infiltration. In half of the cases, HIV p24 protein was expressed. Patients quickly improved with steroids (mainly introduced with HAART intensification). Relapse rate was 36%. After a median of 4 years follow-up, 5 patients had died (2 due to encephalitis, due to its complications) and 4 had sequela. Only 36% of patients were without any sequelae.

Conclusions: This is the first description of a new type of encephalitis in HIV patients characterised by severe neurological symptoms and homogeneous microscopic and radiological findings. The encephalitis is triggered by cytotoxic CD8, but the mechanisms of the disease is otherwise poorly explained.

Presenting author email: xavier.lescure@tnn.aphp.fr

WEAB0304

Effects of randomized regimen and nucleoside reverse transcriptase inhibitor (NRTI) selection on 96 week bone mineral density (BMD): results from ACTG 5142

J. Huang1, M. Hughes1, S. Riddler1, B. Haabrich1, AIDS Clinical Trials Group 5142 Study Team, 1University of California at San Diego, San Diego, United States, 2Harvard School of Public Health, Boston, United States, 3University of Pittsburgh, Pittsburgh, United States

Background: The exact contribution of particular classes of ARV to BMD remains unclear.

Methods: AS142 was an open-label study in 753 treatment-naive subjects randomized equally to: Efavirenz (EFV)+2NRTI versus lopinavir/ritonavir (LPV/r) +2NRTI versus LPV/r+EFV (no NRTI). Zidovudine(DVZ), stavudine(D4T), or tenofovir(TDF) with lamivudine(3TC) was selected prior to randomized, and all whole body DEXA was used. NRTI selection was based on body BMD at baseline, 48 and 96 weeks. Analysis was modified intent-to-treat ignoring regimen changes with no imputation for missing values.

Results: There were significant mean declines in BMD at week 48 that persisted to week 96 (table) among subjects starting each of the regimens. In repeated measures analysis of changes (including randomized regimen, NRTI used and time), there was a significant difference in the NRTI-containing arms (p< 0.001). Compared to subjects taking ZDV, those taking D4T had similar changes (p=0.97) whereas those taking TDF had larger declines (p< 0.001). There was a non-significant trend toward greater declines in arms subjects taking LPV/r +EFV (p=0.080). In the repeated measures analysis, compared to the NRTI-containing regimen, the mean decline in BMD for the LPV/r+TDF+3TC regimen was greater (p=0.004) while the EFV+D4T+3TC and D4T+3TC+EFV regimens had smaller BMD changes (p=0.024 for each).

Overall, fracture rates in the study were low.

Presenting author email: rhaabrich@ucsd.edu

ZDV+3TC d4T+3TC Total

Conclusions: Among the NRTI-containing arms, NRTI selection, especially use of TDF, had a greater effect on BMD change than randomized regimens, which showed a trend for greater declines in the LPV arm. The long term clinical significance remains to be demonstrated.

Presenting author email: rhaabrich@ucsd.edu
Background: Lopinavir/ritonavir (LPV/r) increases tenofovir exposure by inhibiting drug transporters. We examined relationships between change in tenofovir clearance (CtCr) among patients initiating tenofovir disoproxil fumarate (TDF) with concomitant antiretrovirals (LPV/r) or efavirenz (EFV) and drug transporter gene polymorphisms.

Methods: We compared change in CtCr among 474 treatment-naive patients initiating LPV/r+TDF/3TC (n=56), EFV+TDF/3TC (n=62), LPV/r or EFV 2NRTIs without TDF (n=201) or LPV/r+EFV without NRTIs (n=157). CtCr was estimated using Cockcroft-Gault. We evaluated polymorphisms across ABCC1, ABCC3, ABCC4 and SLCO2A1. Wilcoxon tests and mixed-effects models compared regimen type and change in CtCr from baseline to weeks 24, 48, 72 and 96. Jonckheere Terpstra tests analyzed associations between polymorphisms and CtCr changes from baseline.

Results: Combined, TDF-containing regimens had greater CtCr declines than non-TDF-containing regimens (Table - univariate analyses). Decline in CtCr was greater with LPV/r+TDF/3TC vs. EFV+TDF/3TC at week 24 and vs. LPV/r+2NRTIs (non-TDF) through week 96. Adjusting for age, gender, baseline CD4 and HIV RNA, and pre-therapy CtCr, patients receiving LPV/r+TDF/3TC had greater CtCr declines over 96 weeks than patients receiving EFV+TDF/3TC (efficacyadjusted, 65% CI [12.2, 9.5] vs. [37.4, 40.6]; P < 0.01). ABCC2 rs3740066 (Δ CrCl -7.6 ml/min, 95% CI [-12.6, -2.7]; P < 0.01). ABCC2, rs3740066 was associated with preserved CrCl (CC -6.4 ml/min, n=166; CT vs. TT difference: -7.6 ml/min, 95% CI [-12.6, -2.7]; P < 0.01).

Conclusions: Though each of these interventions may have substantial biological efficacy and large impact at high levels of eligibility, coverage and adherence, the impact of each of them is diluted at realistic levels of eligibility, coverage, and adherence. Combination of multiple interventions can lead to large reductions in HIV IR and synergistic effects. HAART is especially effective if combined with at least one other intervention and administered at intermediate to high levels of eligibility, coverage and adherence. Presenting author email: hsc2001@eater-med.cornell.edu

WEAC0035

Antiretroviral regimen and pharmacogenetic determinants of tenofovir-associated change in creatinine clearance in ACTG protocol A5142


University California San Diego, San Diego, United States, 1Harvard School of Public Health, Boston, United States, 2University of Pittsburgh, Pittsburgh, United States, 3University of Southern California, Los Angeles, United States, 4Vanderbilt University, Nashville, United States

Background: Tenofovir disoproxil fumarate (TDF) is approved in many countries for the treatment of HIV-1 infection. TDF-based regimens have been associated with increased risk of renal insufficiency. While the role of pharmacogenomics on renal toxicity due to TDF has been studied, results have been inconsistent. We report associations of tenofovir clearance, a pharmacogenetic marker of renal function, with antiretroviral regimens.

Methods: A total of 568 participants on tenofovir for at least six months and with a baseline serum creatinine were included in this analysis. The primary outcome was the change in creatinine clearance (ΔCrCl) from baseline to 96 weeks. The change in creatinine clearance was examined by a mixed-effects model with ΔCrCl as the dependent variable, and regimen type as the independent variable. ΔCrCl was modeled using change from baseline to week 24 and week 96. The model was adjusted for age, sex, baseline renal function, baseline CD4+ cell count, and baseline HIV RNA.

Results: ΔCrCl at week 96 was -9 ml/min. (95% CI: -13.2, -4.8; P < 0.001). ΔCrCl was greater for LPV/r+TDF/3TC vs. EFV+TDF/3TC at week 24 and vs. LPV/r+2NRTIs (non-TDF) through week 96. Adjusting for age, gender, baseline CD4+ cell count and baseline HIV RNA, patients receiving LPV/r+TDF/3TC had greater ΔCrCl declines over 96 weeks than patients receiving EFV+TDF/3TC (efficacy-adjusted, 65% CI [12.2, 9.5] vs. [37.4, 40.6]; P < 0.01). ABCC2 rs3740066 (Δ CrCl -7.6 ml/min, 95% CI [-12.6, -2.7]; P < 0.01). ABCC2, rs3740066 was associated with preserved CrCl (CC -6.4 ml/min, n=166; CT vs. TT difference: -7.6 ml/min, 95% CI [-12.6, -2.7]; P < 0.01).

Conclusions: Though each of these interventions may have substantial biological efficacy and large impact at high levels of eligibility, coverage and adherence, the impact of each of them is diluted at realistic levels of eligibility, coverage, and adherence. Combination of multiple interventions can lead to large reductions in HIV IR and synergistic effects. HAART is especially effective if combined with at least one other intervention and administered at intermediate to high levels of eligibility, coverage and adherence. Presenting author email: hsc2001@eater-med.cornell.edu

WEAC0010

The impact of interventions on HIV transmission at the level of discordant partners

H. Chemetov1, T. Halliett2, L. Abu-Raddad3,4,5

1Weill Cornell Medical College – Qatar, Doha, Qatar, 2Imperial College London, London, United Kingdom, 3Vaccine and Infectious Disease Institute, Fred Hutchinson Cancer Research Center, Seattle, United States, 4Weill Cornell Medical College, New York, United States

Background: The contribution of HIV incidence among stable discordant partnerships to all HIV incidence is likely increasing with the maturing of the HIV epidemic in sub-Saharan Africa. Formulation of an effective package of interventions to reduce HIV incidence among discordant partners is key to HIV prevention efforts. We examined the impact of four interventions (male circumcision (MC), condoms, HAART, and PrEP) on HIV incidence rate (IR) at varying levels of eligibility, user adherence, eligibility and coverage.

Methods: We built a deterministic mathematical model to assess the impact of interventions and their synergies. Our model was informed by available efficacy, adherence, eligibility and coverage data and parameterized using the Bushenyi household-based voluntary testing and counseling survey data. Uncertainty and sensitivity analyses were incorporated using Monte Carlo sampling for the ranges of the biological, behavioral, and intervention parameters.

Results: Assuming full eligibility and coverage, HAART, Prep, condoms, and male circumcision can achieve an HIV IR reduction over three years by 66%, 32%, 28%, and 20%, respectively. Combining two interventions at a time led to a range of incidence reductions of 42% to 78%, while combining three interventions led to a range of 62% to 85%. Combining all four interventions reduced incidence by 88%. However, assuming realistic levels of eligibility, coverage, and adherence: HAART, Prep, condoms, and MC reduced HIV IR by 13%, 10%, 14%, and 9%, respectively.

Conclusions: Though each of these interventions may have substantial biological efficacy and large impact at high levels of eligibility, coverage and adherence, the impact of each of them is diluted at realistic levels of eligibility, coverage, and adherence. Combination of multiple interventions can lead to large reductions in HIV IR and synergistic effects. HAART is especially effective if combined with at least one other intervention and administered at intermediate to high levels of eligibility, coverage and adherence. Presenting author email: hsc2001@eater-med.cornell.edu

WEAC0040

Changes in patterns of migration barely influence the heterosexual HIV epidemic in Europe

M. Kring1, M. van Veen1, R. Coutinho1, M. Donoghoe1, M. Prins1,2

1National Institute of Public Health and the Environment, Bilthoven, Netherlands, 2Academic Medical Center of the University of Amsterdam, Amsterdam, Netherlands, 3WHO Regional Office for Europe, Copenhagen, Denmark, 4Public Health Service of Amsterdam, Amsterdam, Netherlands

Background: Among migrants who originate from countries with generalized HIV epidemics and reside in Europe, the prevalence of HIV has been found to be higher compared to the general population in their country of residence. This study investigates the contribution of migrants to HIV incidence and the impact of demographic changes among migrants to the heterosexual HIV epidemic in Europe.

Results: With a bold scale-up of interventions between now and 2015, the model projects that by 2031, 1.25 million infections, and over 700,000 AIDS deaths could be averted in China and over 5.5 million infections, and nearly 4 million AIDS deaths could be averted in South Africa. With available approaches, up to 75% of new infections and HIV deaths could be prevented. Though each of these interventions may have substantial biological efficacy and large impact at high levels of eligibility, coverage, and adherence, the impact of each of them is diluted at realistic levels of eligibility, coverage, and adherence. Combination of multiple interventions can lead to large reductions in HIV IR and synergistic effects. HAART is especially effective if combined with at least one other intervention and administered at intermediate to high levels of eligibility, coverage and adherence. Presenting author email: k.case@imperial.ac.uk

WEAC0012

The future of HIV: the impact of prevention, treatment and technology on HIV infections and deaths through 2031

K.A. Case1, G.P. Garnett1, T.B. Halliett2, J. Stover1, P. Piot1

1Imperial College London, Institute for Global Health, London, United Kingdom, 2Futures Institute, Glastonbury, United States

Background: Long-term projections of the future course of the HIV pandemic allow us to assess its scale and to understand the potential impact of prevention interventions, treatment, and technology.

Methods: We applied a dynamic transmission model (Goals) to explore the impact of prevention interventions (VCT, mass media, condom promotion and distribution, community mobilisation, education programmes, youth programmes, programmes for populations made vulnerable by the drug epidemic and formulation of an effective package of prevention interventions (VCT, mass media, condom promotion and distribution, community mobilisation, education programmes, youth programmes, programmes for populations made vulnerable by the drug epidemic and technology (male circumcision) on projected new infections and AIDS deaths in two contrasting settings - China and South Africa. The model simulates HIV transmission among adult heterosexuals, men who have sex with men and injecting drug users.

Results: With a bold scale-up of interventions between now and 2015, the model projects that by 2031, 1.25 million infections, and over 700,000 AIDS deaths could be averted in China and over 5.5 million infections, and nearly 4 million AIDS deaths could be averted in South Africa. With available approaches, up to 75% of new infections and HIV deaths could be prevented. Though each of these interventions may have substantial biological efficacy and large impact at high levels of eligibility, coverage, and adherence, the impact of each of them is diluted at realistic levels of eligibility, coverage, and adherence. Combination of multiple interventions can lead to large reductions in HIV IR and synergistic effects. HAART is especially effective if combined with at least one other intervention and administered at intermediate to high levels of eligibility, coverage and adherence. Presenting author email: k.case@imperial.ac.uk
WEAC002 Preventive Interventions among Young

WEAC0021 HIV prevention in young people in Sub-Saharan Africa: a systematic review and update of the evidence

A.M. Doyle1, S. Napierala Mavedzenge, D.A. Ross
1London School of Hygiene & Tropical Medicine, Epidemiology and Population Health, London, United Kingdom

Background: Evidence-based recommendations should guide efforts towards the UN goals on HIV/AIDS in young people. In 2006, the WHO, Staying, Ready, Go! Global review series provided such recommendations. Results from four recent major trials prompted this updated review and recommendations.

Methods: We used the SRG systematic review approach and synthesised recent evidence (Jan 05-Dec 08) with that covered by the first SRG review (1990-2005). We reviewed the effectiveness of interventions to improve reported sexual behaviour and reduce STIs and pregnancies for interventions implemented in schools, health services, and/or geographically-defined communities.

Results: Screening nearly 1200 citations published in 2005-2008 identified 22 randomised trials meeting the inclusionary criteria. Only five studies included biological outcomes. Only one intervention type received a “Go!” recommendation for interventions in geographically-defined communities were also given a “Ready” recommendation.

Conclusion: The large number of new studies since the first SRG review highlights the recent activity in research on HIV prevention in young people.

WEAC0203 An innovative multi-level intervention for HIV prevention in young South African women: pilot of a randomized controlled trial

C.L. MacHaild, A. Pettifer, M. Adato, K. Kahn, A. Selin, H. Rees
1Reproductive Health & Research Unit, University of the Witwatersrand, Johannesburg, South Africa, 2University of North Carolina – Chapel Hill, 3Gilling School of Global Public Health, Chapel Hill, United States, 4IFPRI, Washington, United States, 5AEPH, Health Protection Agency, University of the Witwatersrand, Johannesburg, South Africa, 6University of North Carolina – Chapel Hill, Carolina Population Center, Chapel Hill, United States, 7Reproductive Health & Research Unit, Johannesburg, South Africa

Background: Young women in Africa are at high risk of HIV infection; in South Africa they are at 3-4 times more risk than males. There are limited HIV prevention interventions addressing the multiple factors influencing HIV risk, although school attendance has been shown to decrease HIV risk among women. This intervention combines a cash transfer conditional on school attendance for young women with a community mobilization programme to change gender norms in young men. Conditional cash transfers have been shown to increase girls’ school attendance in many countries, but the use of cash transfers for HIV prevention through schooling is a new field of study.

Methods: This study is a pilot of only the cash transfer component. Forty vulnerable young women from one school in rural Mpumalanga and their household members will be recruited for a two month trial of the cash transfer conditional on 80% school attendance. They will be randomized into a treatment group receiving the conditional cash transfer and a control group. Young women and their households will participate in computer assisted interviews at baseline and additional and quantitative and qualitative data collection at two time points during the pilot to determine feasibility and acceptability of research and intervention procedures.

Results: The pilot study will be conducted from February to May 2010. Feasibility will be measured through documenting pilot processes, including recruitment of participants to meet requirements for cash transfer payments. Acceptability of biological sample collection, randomization process and school attendance monitoring will be determined. Additionally, relationship dynamics between young women, their households will be recruited for a two month trial of the cash transfer conditional on 80% school attendance. They will be randomized into a treatment group receiving the conditional cash transfer and a control group. Young women and their households will participate in computer assisted interviews at baseline and additional and quantitative and qualitative data collection at two time points during the pilot to determine feasibility and acceptability of research and intervention procedures.

Conclusion: Building on lessons learned from this study, a longitudinal study involving 1500 young women and their household members will follow.

Presenting author email: hrees@ruco.za

WEAC0204 Brief cellphone-delivered counseling as a novel strategy to enhance the maintenance of HIV behavioral intervention efficacy: results from a supplemental treatment effectiveness trial

B. DiClemente1, G. Wingood2, E. Rose3, J. Sales4, T. Latham4, J. Hardin3, A. Calliendo4
1Rollins School of Public Health, Emory University, Center for AIDS Research, Atlanta, United States, 2Rollins School of Public Health, Emory University, Atlanta, United States, 3University of South Carolina, Epidemiology & Biostatistics, Columbia, United States, 4Emory University School of Medicine, Pathology, Atlanta, United States

Background: Behavioral interventions can reduce HIV-associated behaviors and sexually transmitted infections. Unfortunately, over time, intervention effects rapidly deteriorate. We tested a novel maintenance strategy, brief cellphone-delivered counseling, designed to sustain intervention effects.

Methods: From June 2005-June 2007, 701 young African American women, 14-29 years, recruited from clinics were enrolled, provided informed consent and completed baseline data collection. As a result of baseline Chlamydia detection, 30% were randomized to receive Chlamydia treatment. Participants in both conditions completed 5-week group-formatted HIV prevention intervention. Subsequently, participants in the intervention condition received bi-monthly, individually tailored, cellphone-delivered HIV prevention counseling; participants in the comparison condition received dose-equivalent cellphone-delivered nutrition counseling. Participants in both conditions were followed bi-monthly. The primary outcome was at 6-, 12- and 18-months post-randomization. We utilized growth curve versions of random-effects linear models to contrast intervention differences at each follow-up assessment and compared these results across the three follow-up assessments.

Results: Relative to baseline, both conditions showed significant short-term effects (12 months). However, statistically significant differences were ob-
WEAO205 Preventing HIV among juvenile offenders: evidence from randomized and quasi-randomized controlled trials

K.A. Underhill, D. Operario
Brown University, Department of Community Health, Providence, United States

Background: Juveniles with criminal justice involvement are at disproportionately high risk for HIV infection. Drug and alcohol use, mental health issues, poverty, abuse, neighborhood effects, risky sexual behaviors, peer networks, and inadequate or unstable housing contribute to HIV risk in this group. This systematic review aimed to identify, appraise, and summarize the evidence for the effectiveness of HIV prevention programming among juvenile offenders.

Methods: Cochrane systematic review methods were used. Two reviewers examined 9153 records from PubMed, PsyCINFO, EMBASE, CENTRAL, and cross-referencing. Included studies met the following criteria: randomized or quasi-randomized controlled trial; all participants had criminal justice involvement (arrest, conviction, imprisonment); participants were juveniles not known to be HIV-positive; interventions aimed to prevent HIV; results included an HIV-related behavioral or biological outcome. We provide a narrative synthesis of results; meta-analysis was impossible due to data limitations.

Results: Seven studies met inclusion criteria, along with two ongoing studies for which outcome data were unavailable. Included studies enrolled n=2559 participants, and all but one study took place in the US. Studies enrolled all men (2 studies), or a mixed group (5). All interventions were psychosocial, including group intervention, family therapy, case management, and motivational interviewing. Three studies (n=1029) found a protective intervention effect on one or more HIV-related behaviors, compared to control groups that received usual care services or basic information about HIV. No study observed an intragroup effect. Across studies, limitations included relatively short follow-up periods and underutilization of biological outcomes.

Conclusions: Juvenile offenders in detention and community settings can benefit from HIV prevention interventions, although additional trials are necessary to identify the most effective prevention strategies. Interventions do not appear to cause harm in this population. We found no trials examining interventions tailored for female juvenile offenders, which is a critical gap in HIV prevention knowledge.

Presenting author email: rdiel@emory.edu

WEAD002 The intersection of race, gender, sexual orientation and HIV: understanding multi-dimensional forms of stigma and discrimination experienced by women living with HIV in Ontario, Canada

C. Logie1, L. James2, W. Thara3, M. Loutfy1
1University of Toronto, Faculty of Social Work, Toronto, Canada, 2Women’s Health in Women’s Hands CMC, Toronto, Canada, 3Women’s College Research Institute, Toronto, Canada

Background: HIV-related stigma interacts with structural inequities and may be exacerbated for marginalized populations. The increased HIV infection rate among women in Canada, particularly among African/Caribbean and Aboriginal women, underscores the importance of understanding multi-dimensional forms of stigma and discrimination. We used a critical feminist epistemology to explore experiences of stigma and discrimination among women living with HIV from marginalized communities.

Methods: We conducted 15 focus groups with women living with HIV across Ontario, Canada including: Aboriginal, African/Caribbean, sex worker, injection drug user (IDU), lesbian/bisexual, and transgender women. Three of the focus groups were implemented with HIV researchers and service providers in Ottawa, Hamilton and Toronto. We used a semi-structured interview guide to explore strengths and challenges experienced by women living with HIV. Focus groups were digitally recorded, transcribed, entered into NVivo and examined with narrative thematic techniques from grounded theory.

Results: Focus group participants (n=104; mean age=38 years; 23% lesbian/bisexual, 22% transgender; 69% ethnic minority) attributed experiences of stigma and discrimination to: HIV serostatus, sexism, racism, homo/transphobia, and other marginalized identities (e.g. IDU). Participant narratives highlighted widespread stigmatization across multiple realms (e.g. familial, social, health care) that negatively impacted mental health, relationships, and treatment access. Lesbian, bisexual, and transgender women described the intersection of homo/transphobia with gender-based violence as a route of HIV infection. Ethnic minority women and IDU reported that discrimination within healthcare reduced utilization of health services. HIV-related stigma emerged as major reason why women living with HIV remained in situations of domestic violence.

Conclusions: Women living with HIV described interdependent and mutually constitutive relationships between social identities and social inequities such as HIV-related stigma, homo/transphobia and racism. Understanding the deleterious effect of stigma(s) on HIV risk, mental health, and access to care for women living with HIV can inform health care provision, domestic violence programs, and multi-level stigma reduction interventions.

Presenting author email: logisch@yahoo.com

WEAD0102 Framing Positive Perceptions and Practice: Analysing and Addressing Stigma

WEAD0103 Stigma and survival in older adult sexual minority men living with HIV/AIDS in New York City

B. Hail1, M. Padilla2, E. Lorenzo-Blanco3
1Columbia University and NYPI HIV Center, New York, United States, 2University of Michigan, Ann Arbor, United States

Background: The proportion of HIV/AIDS cases in older adults has nearly doubled in recent years, with adults fifty and older representing a large and growing proportion of the US population living with HIV/AIDS (PLHWA). Recent projections estimate that in the next decade one of the largest proportions of PLHWA living in the United States will be older than fifty. Despite this demographic transformation, few studies have examined the experiences of older sexual minority men living with HIV/AIDS. Attending to this research gap, this study examines the ways in which older adult sexual minority men narrate the role of stigma in their ability to survive with HIV/AIDS.

Methods: In depth interviews were conducted with thirty New York City sexual minority men fifty and older who have been living with HIV for thirteen or more years. Systematic sampling was used to achieve equal distribution across ethnic/racial groups, such that the sample includes ten blacks, ten Hispanics, and ten whites. Grounded theory guided the development of a codebook, which investigators used to code interviews, focusing on the theme of stigma.

Results: Respondents articulate that stigma related to HIV status, sexual orientation, ethnicity and age has deeply impeded their ability to cope with HIV/AIDS over time. However, respondents employ multiple stigma management techniques in order to manage and resist the health-damaging influence of stigma.

Conclusions: Stigma is a major barrier in the ability of older PLHWA to survive with HIV/AIDS. Future research is needed in order to develop empowering ways in which older PLHWA can mitigate the influence of stigma, as well as to develop innovative approaches to eradicating the structural sources of stigma in their lives.

Presenting author email: fhg4@columbia.edu
WEAD0104

Significant changes in HIV stigma resulting from randomized interventions among male and female migrant construction workers in Shanghai, China

L. Calzavara1, L. Kang, H. Fang1, H. Wang1, L. Xiu, M. Yang1, J. Ren2, L. Kang1, C. Ren1, R. L. Ren1, H. Wang2, C. Li1, R. E. Kyi1
1University of Toronto, HIV Social, Behavioural, and Epidemiological Studies Unit, Datta Lala School of Public Health, Toronto, Canada, 2Shanghai Municipal Center for Disease Control and Prevention, Shanghai, China, 3Huangpu CDC, Shanghai, China, 4National CDC, Shanghai, China

Background: To assess the effectiveness of multiple interventions in reducing stigmatizing attitudes to HIV+ve persons.

Methods: A randomized controlled intervention trial was conducted among 1,871 randomly selected construction workers in 18 construction sites. Baseline and six-month post-intervention surveys were conducted. Three educational interventions focusing on facts regarding HIV transmission were utilized: low-level (pamphlet); intermediate (pamphlet, posters, DVDs); and high (pamphlet, posters, DVDs, group/individual counseling). Stigma was measured using a Likert scale (0-3) with agreement to three statements. Composite score ranged from 0-9 (low-high). Descriptive statistics were used to examine change in post-intervention stigma by level of intervention.

Results: At baseline, stigma was high (mean score=5.16 (95% CI 5.00-5.32)). Over 85% were afraid of HIV+ve persons; 81% felt they were ‘repulsive’; and 39% felt they did not deserve sympathy. No significant differences in stigma were found between sites at baseline or by gender. At six months post-intervention, mean stigma was 3.9 (95% CI 3.75-4.02); a reduction of 1.3 points (+/-0.001). While all three interventions resulted in reductions in HIV-associated stigma (p<0.001), greater decreases occurred in low (from mean of 5.33 to 3.92 (95%CI;3.68-4.16)) and high (from 5.18 to 3.81(95%CI;3.58-4.03)) interventions compared to intermediate (from 4.97 to 3.96 (95%CI;3.72-4.20)). Those with the highest stigma at baseline experienced the greatest reductions. Those unsympathetic decreased from 25% to 13%; those fearful from 39% to 13%; and those repulsed decreased from 28% to 8%.

Conclusion: Widely shared levels of HIV stigma among migrant construction workers were significantly reduced by educational interventions focused on correcting misconceptions. Future research should focus on identifying factors that contribute to stigma reduction and how stigma can be further reduced.

WEAD0106

Treatment access for positive MSM in the Asia Pacific: lessons learned from an analysis about the interplay between structural barriers and cultural constraints that impact on individual and community health outcomes in six countries

M. Choo1, V.R. Nair1, A. Lim1, B.K. Raju2, N. Kustantionio3, J. Jarri, T. Wong1, M.P. Theit1, R. Baldwin4, A. Chen4
1Centre of Excellence for Research in AIDS (CERiA), Medicine, Kuala Lumpur, Malaysia, 2NIDPASHA+, New Delhi, India, 3Action for AIDS Singapore, Singapore, 4Blue Diamond Society, Chittan, Nepal, 5HIVERS, Jakarta, Indonesia, 6Kuala Lumpur AIDS Support Services Society (AKASS), Kuala Lumpur, Malaysia, 7The HELP, Mandalay, Myanmar, 8Asia Pacific Network of People Living with HIV (APAN)

Issues: We know relatively little about treatment access specific to positive men who have sex with men (MSM) in the Asia Pacific; in particular how structural barriers and cultural constraints inform how HIV-positive MSM who can negotiate access to treatment within local contexts. With the call for universal access, there is an increasing need to explore the dynamic interplay between social structures and local cultures in determining individual and community health outcomes.

Description: In 2009, with the help of community-based organisations, the Asia Pacific Network of People Living with HIV (APAN+) conducted a peer-led study in India, Indonesia, Malaysia, Myanmar, Nepal and Singapore. Addressing multiple contexts that contribute to the experience of treatment access and treatment prospects for MSM in the Asia Pacific region, the study consisted of a survey (n=897) and in-country focus groups. Data assessed the availability and accessibility of treatment, economic and social costs, as well as support networks that form the nexus of treatment access for positive MSM in these six countries.

Lessons learned: The constant interplay between infrastructural barriers and sociocultural environment in each country can have a profound impact on individual healthcare options. Even where treatment is available for free, the costs of medical tests and transportation to seek treatment can be prohibitive. Generally, obtaining ARV treatment when needed remains uncertain for the majority of study participants. Stigma and discrimination, particularly amongst healthcare providers, do become a major disincentive to seek treatment. In some countries, strong cultural norms pertaining to sexuality increases chances of social isolation and loss of social support; and gender-biased an additional challenge for transgender individuals to access treatment.

Next steps: To help positive MSM better negotiate their right to health, efforts must be made to empower them to collectively engage at a regional level.

Presenting author email: liviana.calzavara@utoronto.ca

WEAD02 Ensuring Safety, Security and Autonomy: Why We Must Overcome Gender Based Violence

WEAD0201

Turning the tide: overcoming stigma and discrimination through HIV status disclosure by religious leaders living with HIV – lessons from Kenya

J. Mwaura Ng’ang’a1,2
1Network of Religious Leaders Living with of Personally Affected by HIV (KENERELA+), National Coordinator, Nairobi, Kenya, 2International Network of Religious Living with or Personally Affected by HIV, Johannesburg, South Africa

Issues: Stigma and discrimination are recognized as a major obstacle in addressing the spread of HIV and managing its impact. Religious leaders living with HIV are often especially apprehensive about disclosing their status because of the real threat of being expelled from their positions in Churches, Mosques and treated like sinners.

Description: The Kenya Network of Religious Leaders Living with or Personally Affected by HIV (KENERELA+) is an interfaith network. It forms PUHIV support groups; builds capacity in counseling, advocacy, mobilization, prevention, care and support; promotes disclosure to faith communities, families and friends; and supports community based activities to reduce stigma and discrimination. To date KENERELA+ has engaged 87 interfaith HIV + religious leaders. They have helped initiate over 500 faith community programmes in 8 provinces of Kenya with a population of over 2 million people. A 2009 study in 26 districts showed substantial increases in the numbers of people accessing VCT, disclosing their HIV status, accessing treatment and accepting PUHIV as a result of KENERELA+’s interventions.

Lessons learned: Skills training has enabled religious leaders to disclose their own HIV status and to lead their flocks to seek testing, treatment, care and support. Trained leaders are proactive in creating awareness in their communities, families and faith leaders. Stigma and discrimination, particularly amongst healthcare providers, do become a major disincentive to seek treatment. In some countries, strong cultural norms pertaining to sexuality increases chances of social isolation and loss of social support; and gender-biased an additional challenge for transgender individuals to access treatment.

Next steps: To help positive MSM better negotiate their right to health, efforts must be made to empower them to collectively engage at a regional level.

Presenting author email: liviana.calzavara@utoronto.ca

WEAD0202

Preventing HIV by preventing violence: global prevalence of intimate partner violence and childhood sexual abuse

K. Devries1, L. Bacchus1, J. Maki1, J. Child1, G. Faldier1, C. Pallotti1, C. Garcia-Moreno2, C. Watts1
1London School of Hygiene and Tropical Medicine, Gender, Violence and Health Centre, London, United Kingdom, 2WHO, Reproductive Health, Geneva, Switzerland

Background: Physical and sexual intimate partner violence (IPV) and childhood sexual abuse (CSA) increase risk of HIV infection both directly via viral transmission and indirectly, through increasing the likelihood of subsequent risky sexual behaviour. Violence is a direct obstacle to achieving the Millennium Development Goals on HIV reduction and gender equality. As part of a larger, global burden of disease analysis we estimated the regional and global prevalence of IPV and CSA in women and men of all ages.

Methods: Global systematic review of over 30000 published and unpublished abstracts in English, French, Spanish, Portuguese, Russian, Chinese, Japanese and other languages. Secondary analysis of population-representative data from: the Demographic and Health Surveys (24 countries), Gender, Alcohol and Culture: An International Study (18 countries), the International Violence Against Women Surveys (9 countries), and in-country focus group discussion analysis on Women’s Health and Domestic Violence Against Women (10 countries); Specialized models were developed to estimate prevalence in countries without data.

Results: Data from 96 countries show nearly 0-70% of ever-partnered women have experienced IPV, with 17 countries reporting national prevalence >30%. Data from 45 countries shows 0-30% of ever-partnered men have experienced IPV, but only one country reported prevalence >30%. Higher prevalence was reported in Africa and Latin America. Data from 63 countries show 0-70% of women who were sexually abused as children, with prevalence above 10% in 14 countries. Data from 42 countries shows 0-12% of men report childhood sexual abuse, with 8 countries reporting prevalence >10%. CSA prevalence was higher in high-income countries.

Conclusions: The prevalence of IPV and CSA varies widely by sex, age, and global region, with women tending to report higher prevalence. Given the direct and indirect effects of violence on HIV risk, policy makers, service providers and those planning prevention services must integrate responses to violence into HIV programming.
WEADO203

The language of love: Tanzanian women define intimacy, sexuality and violence in the 21st century

M. Leslie-Rule
EngenderHealth, CHAMPION Project, Dar es Salaam, Tanzania, United Republic of

Background: Based on research that violence against women and gender roles are social constructions, this study focused on women’s definitions of intimacy and sexuality and how these affect their experiences of violence.

Methods: Qualitative research methods were used to explore the meaning of intimacy and sexuality and how these are associated with violence. Focus group discussions and in-depth interviews were conducted in mainland Tanzania.

Results: Women’s definitions of intimacy and sexuality were complex and varied. Intimacy was seen as a fundamental aspect of relationships, but also as something that can be used to control or manipulate. Violence was seen as a violation of intimacy and sexuality, but also as a way to demonstrate control.

Conclusions: Women’s definitions of intimacy and sexuality are important for understanding their experiences of violence. This research highlights the need for a deeper understanding of the social constructions of violence in Tanzania.

WEADO204

Childhood sexual abuse, gay-related victimization, HIV infection and syndemic productions among men who have sex with men (MSM): findings from the Multicenter AIDS Cohort Study (MACS)

1University of Pittsburgh Graduate School of Public Health, Behavioral and Community Health Sciences, Pittsburgh, United States, 2University of California at Los Angeles, Center for HIV Identification, Prevention, and Treatment Services, Los Angeles, United States, 3Georgia State University Medical Center, Division of Infectious Diseases, Washington, D.C., United States, 4University of Chicago, Chicago, United States, 5University of California at Los Angeles, Psychiatry and Biobehavioral Sciences, Los Angeles, United States

Background: Childhood sexual abuse and HIV infection are associated with increased risk of syndemic productions among MSM. This study aimed to examine the associations among and between these variables.

Methods: A cross-sectional study was conducted among MSM recruited from the Multicenter AIDS Cohort Study. Bivariate and multivariate analyses were used to examine the associations.

Results: Childhood sexual abuse was associated with increased risk of HIV infection and other syndemic productions among MSM. The association was strongest among men who reported both childhood sexual abuse and gay-related victimization.

Conclusions: Childhood sexual abuse is a significant predictor of HIV infection and other syndemic productions among MSM. Interventions targeting childhood sexual abuse may be effective in reducing the burden of HIV and other syndemic productions among MSM.

WEADO205

A global examination violence in the lives of female injection drug users

S. Roberts, B. Mathers, L. Degenhardt
National Drug and Alcohol Research Centre, University of New South Wales, Medicine, Sydney, Australia

Background: Female injection drug users (FIDUs) are at increased risk of violence compared to male IDUs. This study aimed to examine the prevalence and experiences of violence in the lives of female IDUs globally.

Methods: A systematic review of literature was conducted to identify studies examining violence in the lives of female IDUs. Data were extracted and analysed to provide a global overview of the prevalence and experiences of violence.

Results: Violence was pervasive in the lives of female IDUs, with physical, sexual and emotional violence reported. Violence was associated with poor health outcomes and reduced quality of life.

Conclusions: Violence is a significant problem for female IDUs globally. Interventions are required to address the perpetrators of violence and to provide support and resources to female IDUs.

WEADO206

Addressing gender-based violence and the reproductive health needs of women living with HIV/AIDS in Vietnam: an evaluation of interventions to improve health and social services

L. Messer8,1, S. Lin7,1, L.A. Tran2, N.T. Nguyen3, M.H. Dao2, K. Eiffir4, R. Semm
1Boston University School of Public Health, International Health, Boston, United States, 2Center for Community Health and Development, Hanoi, Vietnam, 3Life Center, Ho Chi Minh City, Vietnam, 4John Snow International, Boston, United States

Background: Addressing gender-based violence and the reproductive health needs of women living with HIV/AIDS is critical in Vietnam. This study aimed to evaluate the effectiveness of interventions to improve health and social services for women living with HIV/AIDS.

Methods: A qualitative study was conducted in Vietnam using interviews, focus groups and participatory observation. Data were analysed using thematic analysis.

Results: Women living with HIV/AIDS experienced high levels of gender-based violence, including physical, sexual and emotional abuse. Interventions that addressed gender-based violence and reproductive health needs were effective, but sustainability was a concern.

Conclusions: Interventions that address gender-based violence and reproductive health needs for women living with HIV/AIDS are critical in Vietnam. However, sustainability of these interventions is a challenge.

WEADO301

Who is the vulnerable child? Using survey data to identify children at risk in the era of HIV and AIDS

P. Akwara1, B. Noubary2, P. Lim Ah Ken2, K. Johnson3, R. Yates2, W. Winfrey4, S. Shoptaw5, R. Stall1, 1Boston University School of Public Health, International Health, Boston, United States, 2Center for Community Health and Development, Hanoi, Vietnam, 3Life Center, Ho Chi Minh City, Vietnam, 4John Snow International, Boston, United States

Background: Over the past decade, there has been increased global attention to children affected by HIV and AIDS. This study aimed to identify children at risk of HIV and AIDS in the developing world.

Methods: A survey of children in various countries was conducted to identify children at risk of HIV and AIDS. Data were analysed using descriptive and multivariate analyses.

Results: Children in countries with high rates of poverty and conflict were at increased risk of HIV and AIDS. Gender was also a significant predictor of risk.

Conclusions: Children in high-risk areas are at increased risk of HIV and AIDS. Interventions are required to reduce the burden of HIV and AIDS on these children.
WEAD0302
The child went back to the village: rethinking HIV-positive child care and treatment through mobility and “family nomadism” in Burkina Faso

F. Hejajka1,2
TMF, 145, Montpellier, France, 1EHESP, CEaR, Paris, France

Background: Care and treatment of HIV-positive children have been poorly addressed in terms of mobility. As children are dependent on a third party, mobility of their caregivers may thus jeopardize continuum of care and adherence to treatment. This study aims at investigating the phenomenon of “family nomadism” and its consequences on child care and treatment.

Methods: Ethnographic data were collected through a qualitative study conducted in Burkina Faso between 2005 and 2008. Participant observation and semi-structured interviews were conducted with 49 children living with HIV (7 to 11 years old) and their caregiver(s).

Results: Children living with HIV are severely affected by mobility - the term called “family nomadism”. Family nomadism is characterized by either the caregivers’ mobility or children’s circulation because of changes of caregivers (parents, relatives, and social workers). Caregivers’ causes of mobility are professional (trade, seasonal work...), social (caring for sick persons, attending funerals and traditional events, finding food andancing places) and personal (wedding, divorce, family conflicts). Caregivers’ mobility may be local, national or transnational, short or long term, definitive or temporary, prepared or unexpected. In such situations, children are faced with lack of regular and proper care and interruption of ART. Resulting from such circumstances, children circulate between different persons and places; hence are faced with abandonment and/or severe neglect. Reasons are : caregivers’ unwillingness to care, disability (because of oldness or sickness) and unawareness of children’s seropositivity. The situation gets stem in rural zones because of insufficient and inaccessible care and treatment.

Conclusions: The study concludes that programs addressing HIV-positive childcare need to integrate a dynamic perspective to manage negative impacts of mobility. Family nomadism is the importance of substitute care-giver’s enhanced information and psychosocial support in taking care of HIV-positive children. Novel programs supporting children facing disruptive situations will remain an urgent need.

Presenting author email: fabienne.hejajka@ird.fr

WEAD0303
Risk behavior in perinatally HIV-infected youth: co-morbidity of mental health problems, sexual and drug use behavior, and non-adherence to antiretroviral therapy

1Columbia University and New York State Psychiatric Institute, HIV Center for Clinical and Behavioral Studies, New York City, New York, United States, 2Harvard School of Public Health, Epidemiology, Boston, United States, 3Children’s Memorial Hospital, Child and Adolescent Psychiatry/Special Infectious Diseases, Chicago, United States, 4University of California at San Francisco, Pediatrics, San Francisco, United States, 5Children’s Diagnostic & Treatment Center, Fort Lauderdale, United States, 6University of Illinois at Chicago, Pediatrics, Chicago, United States, 7University of Florida at Jacksonville, Pediatrics, Jacksonville, United States, 8National Institute of Mental Health/ National Institute of Health, Division of AIDS Research, Bethesda, United States, 9Tulane University Health-Sciences Center, Pediatrics, New Orleans, United States

Background: Perinatally HIV-infected adolescents may be at increased risk for poor mental health and risk behavior, yet few studies have examined the co-morbidity of behavioral health problems ("co-morbidity") and the use of HIV infection. In a sample of perinatally HIV-infected (PHIV+) and peri- nataIly HIV-uninfected (PHUN+) adolescents, we examined the co-morbidity of mental health problems, sexual and drug risk behavior, and (in PHIV+) non-adherence to antiretroviral therapy (ART).

Methods: Participants included 254 youth, ages 10-16 years (mean=13), en- rolled in a US-based study examining the impact of HIV and ART on youth.

In addition to biomedical tests, a battery of psychosocial measures is administered via audio computer assisted self-interviews (ACASI) or face-to- face interviews with youth and their primary caregivers. We calculated the prevalence of each co-morbidity, and identified factors associated with having multiple co-morbid behaviors.

Results: Nearly half of the participants met criteria for at least one behav- ioral health problem, most frequently a mental health problem (30%), with the onset of sex among each sex aged 16-18 years and early sexual debut among adolescents aged 15-17 years, disaggregated by sex.

Conclusions: Overall, the findings point to the need for a multivariant ap- proach to defining child vulnerability, one which incorporates household wealth as a key predictor of child vulnerability. Given the variation in the findings across national contexts, it is also imperative that additional country-specific child vulnerability markers be developed.

Presenting author email: priscilla_atewani@yahoo.com
WEAD0402

"I don't tell anybody that I am married": understanding the vulnerabilities and associated HIV risk for Indian men having sex with men who are married to women

S. Mane1, M. Mimiaga1,2, S. Saphorn1, M. Vissubramanian3, R. Capo1, C. Johnson1, V. Anand1, A. Kavli1, A. Risbud1, R. Gangakhedkar2, K. Mayer1,3
1The Harvard AIDS Institute, Boston, United States, 2The University of California, San Francisco, United States, 3Institute for HIV, AIDS and Dermatology, India

Background: Studies of Indian men who have sex with men (MSM) indicate 21%-25% are married to women, with married MSM more likely to be HIV-infected and engage in unprotected sex with male and female partners compared to unmarried MSM.

Methods: In 2009, 20 married and 20 unmarried MSM in Mumbai were administered a brief survey and semi-structured qualitative interview at The Humsafar Trust, a non-govt. hospital and research institute, to assess sociodemographic characteristics, sexual risk behaviors and experiences as married or unmarried MSM.

Results: Twenty-five percent identified as kothi (female appearing, predominantly working in the sex trade in anal sex), 20% used male (masculine appearing, predominantly injecting partners), 20% bisexual, 10% double decker (both bisexual and injecting partners), 20% gay/other. Married participants were older than unmarried (mean 27.7 vs. 24.0 years, p<0.03); there were no significant differences in education or income. Three married and two unmarried married participants were HIV-infected. One-hundred percent of married and 70% of unmarried participants had sex with both men and women in the past 12 months (p<0.01) and double deckers were more closely associated with being married compared to non-double deckers (p<0.04). There were no significant differences in sexual risk between those married and unmarried. Emerging themes included: 1) stigma and harassment as MSM from family and society, particularly family pressure to marry, 2) childhood sexual abuse with older males, including the perception that these experiences were formative as MSM, 3) the concealment of married status from other MSM to remain sexually desirable, and 4) the concealment of MSM behavior from wife and family.

Conclusions: Because of conflicting roles, men who are both MSM and married to women may represent a population facing greater stigma who need to remain hidden from others. HIV interventions may benefit from an increased awareness of this population and their specific prevention and treatment needs.

Presenting author email: mane.sandeep@gmail.com

WEAD0403

Deconstructing the HIV transmission bridge: which male clients are having unprotected sex with female sex workers and with their wives?

E.L. Patterson1,2, M. Gallardo1, C. Anderson2, S.J. Semple3, S. Goldenberg4, A.N. Sacks5
1University of California, San Diego, Psychiatry, La Jolla, United States, 2Veterans' Affairs Medical Center, La Jolla, United States, 3CAPASITS (Centros Ambulatorios de Prevención y Atención en SIDA e ITS), Tijuana, Mexico, 4University of California, San Diego, Division of Global Public Health, Medicine, La Jolla, United States

Background: Studies of male clients of female sex workers (FSWs) are rare. We studied clients having unprotected sex with FSWs and their regular partners in order to gain insights into interventions focusing on bridging behaviors.

Methods: Men aged ≥18 years from the U.S. or Mexico who recently paid or traded for sex with FSWs were recruited in Tijuana’s Zona Roja in 2008-2009. Participants underwent interviews and rapid testing for HIV and STIs. Logistic regression compared clients having unprotected sex with FSWs and their wives/steady partners (“bridgers”) with those who did not.

Results: Of 383 men, 134 (35.0%) had wives/steady partners; half (52.2%) of those men were bridgers. Prevalence of HIV and STIs was 2.3% and 16.5%, respectively. Median age was 36; 56.7% were from the U.S.; 84.3% were Hispanic. Monogamy to FSWs last year was 85.3. Bridgers were more likely than other clients to report using drugs during sex with FSWs (81.4% vs. 46.9%, p<0.0001) or that their FSW partners did (73.5% vs. 42.2%, p<0.001). Bridgers also had higher sensation-seeking (p<0.0001) and more (p<0.001) scores, and offered FSWs more money for unprotected sex more often (34.4% vs. 16%, p<0.001). Factors independently associated with bridging were: using drugs during sex with FSWs (AdjOR: 3.9, p=0.007), sensation-seeking (AdjOR: 4.3 per one unit increase, p=0.01), one offering FSWs more money for unprotected sex (AdjOR: 24.5, p=0.003).

Conclusions: Bridgers places themselves and multiple sex partners at high risk of HIV/STI. Sensation-seeking clients who use drugs during sex and coerce FSWs into unprotected sex may be more tolerant of risks that others find unacceptable, suggesting that they may be less responsive to risk-reduction interventions. Researchers should develop individual-level and structural interventions for FSW’s clients rather than rely on FSWs to change behaviors that may not be under their complete control.

Presenting author email: tapatterson@ucsd.edu
Concurrent multiple health risk behavior among adolescents in the Luangnamtha Province, Lao PDR

V. Sychareun

University of Health Sciences, Faculty of Postgraduate Studies & Research, Vientiane Capital, Lao People’s Democratic Republic

Background: Adolescents often experience multiple health risk behaviors (HRBs) which pose a threat to their health, including HIV/AIDS. Health risk behaviors such as alcohol use, smoking, substance use and sexual risk behaviors among youth have been shown to co-occur with each others.

Methods: A cross sectional design was used to examine health risk behaviors of adolescents between the age 14 and 19 living in the Luangnamtha province, Lao PDR. The study was conducted between June to August, 2008. A logistic regression analysis was performed.

Results: A total of 1360 respondents, 661 (48.6%) males with the mean age 16.7 ± 1.6 and 699 (51.4%) females aged 16.17 ± 1.54 were interviewed. The majority had not more than two kinds of risky behaviors. However, multiple risk behavior increased with age for both sexes. About 46.8% (n=636) reported no risk, 35.6% (n=484) had one risk factor; 11.8% (n=160) had two risk factors, 4.2% (n=57) had three risk factors, 1.3% (n=18) had four risk factors and 0.4% (n=5) had five risks.

In the multivariate analysis, older adolescents (OR=2.90, 95% CI-1.33-3.60), attending school (OR=5.53, CI-3.3-8.6), Maka ethnicity (OR=2.20, 95% CI-1.04-4.61) and drinking alcohol (OR=1.88, 95% CI-1-1.3-3.21) were significantly associated with multiple risk behaviors among boys. Having a higher education (OR=0.17, 95% CI-0.06-0.45), and being of Hmong and Vietnam ethnicities (OR=0.38, 95% CI-0.18-0.80) were factors that protected girls from multiple risk behaviors; while peer’s drinking alcohol (OR=2.55, 95% CI-1.39-4.00) and peer’s being sexually active (OR=2.82, 95% CI-1.65-4.71) were significantly associated with multiple risk behaviors.

Conclusions: There is a need to establish peer friendships and follow peers with risky behaviors. Risk reduction messages need to take account of diverse multiple HRBs within the specific socio-cultural and gender specific context and targeted to vulnerable adolescents such as ethnic and less educated adolescents.

Presenting author email: vsychareun@gmail.com

 Provision of antiretroviral treatment in conflict settings: the experience of Médecins Sans Frontières

D.P. Dréon1,2, S. Venis1, J. Greig3, L. Shanks3, T. Elliman1, K. Sabapathy2, L. Friger4, C. Mills4

1 Médecins Sans Frontières Operational Centre Amsterdam, Public Health, Amsterdam, Netherlands, 2 Royal Melbourne Hospital, Victorian Infectious Diseases Service, Melbourne, Australia, 3 Geelong Hospital, Department of Infectious Diseases, Geelong, Australia, 4 Médecins Sans Frontières, Manson Unit, London, United Kingdom

Background: Many countries ravaged by conflict have substantial morbidity and mortality attributed to HIV/AIDS yet HIV treatment is uncommonly available. Although access to antiretroviral HIV treatment is increasing in many resource-limited settings, conflict-affected areas have largely been neglected, denying people living in conflict-affected areas the internationally determined human right to expect their health concerns to be addressed. From 2003 Médecins Sans Frontières introduced HIV care, including antiretroviral therapy, into 24 programmes in conflict or post-conflict settings, mainly in Sub-Saharan Africa. We describe the outcomes and lessons learned to facilitate increased provision of HIV treatment in these settings.

Methods: In a retrospective quantitative and qualitative analysis of programmatic outcome data, project data collected in the Fudha software system were analysed and outcomes compared with ART-LINC data. Programme reports and other relevant documents from interviews with local and headquarters staff were used to develop lessons learned.

Results: HIV care and treatment activities were usually integrated within other medical activities. In the 22 programmes where ART was initiated, more than 10 500 people were diagnosed with HIV and received medical care, and 4533 commenced antiretroviral therapy, including 348 children. Complete data were available for adults in 20 programmes (n=4143). At analysis, 2548 (62%) remained on ART, 422 (10%) had died, 466 (11%) lost to follow-up, 417 (10%) transferred to another programme, and 291 (7%) had an unclear outcome. Outcomes were comparable to stable resource-limited settings with median 12-month mortality and loss to follow-up of 9% and 11% respectively, and median 6-month CD4 gains of 129 cells/mm3. Programme disruption through instability was uncommon, occurring only once.

Conclusions: With commitment, simplified treatment and monitoring, and adaptations for potential instability, HIV treatment can be feasible and effectively provided in conflict or post-conflict settings.

Presenting author email: daniel.obrien@amsterdam.msf.org

Are countries’ policies working? An evaluation of the performance of health centers in delivering HIV/AIDS services in Rwanda

A.K. Rwijereka1, W. Zeng1, P. Amico2, D.S. Shepard3, C. Avila-Figueroa2

1 Brandeis University, Heller School for Social Policy and Management, Waltham, United States, 2 The Joint United Nations Programme on HIV/AIDS, Geneva, Switzerland

Background: Performance across countries in delivering HIV/AIDS services has been found to vary widely. Similar variations might exist within a single country. We first examined the overall efficiency of health centers in Rwanda in delivering three key HIV/AIDS services—anti-retroviral therapy (ART), prevention of mother-to-child transmission (PMTCT), and voluntary counseling and testing (VCT). We then assessed the impact of community-based health insurance (CBHI) schemes and performance-based financing (PBF) in health on improving provision of these HIV/AIDS services.

Methods: Twenty-six rural health centers in Rwanda providing ART services by December 2006 were randomly selected. Data on each center, compiled through site visits and central records, included numbers of personnel, amounts of non-personnel expenditure on HIV/AIDS services, and volumes of ART, VCT and PMTCT services in 2006 and 2007. We evaluated the performance of each health center with data envelopment analysis (DEA). We estimated impacts of PBF and CBHI on AIDS service provision using a fixed-effects model.

Results: As implementation of PBF and CBHI grew from 2006 to 2007, the three AIDS services also increased. The crude average efficiencies of health centers in delivering HIV/AIDS services was 83.9% in 2006. The production frontier shifted outward in 2007, with total efficiency increasing by 15.6% over 2006. Regression results revealed that increased CBHI coverage contributed to the frontier shift, improved efficiency, and greater outputs of PMTCT and VCT services; PBF showed a significant impact on PMTCT services only.

Conclusions: Most health centers in Rwanda have been performing well. Corrective action might be useful for the 21% of health centers with efficiency lower than 60% in both years. CBHI was a particularly important contributor to improving utilization of HIV/AIDS services. The links from CBHI and PBF to HIV/AIDS services demonstrate the beneficial effects of health system strengthening in addressing HIV/AIDS.

Presenting author email: wuzeng@brandeis.edu
WEAE0104 Early access to voluntary HIV counseling and testing, bednets and water filters through an integrated mass implementation campaign in Kenya

R. Granich1, N. Murage2, A. Doyen3, M. Vitoria1, S. Crowley1, B. Williams4

Background: Early access to HIV counseling and testing is essential, however, an estimated 60% of people living with HIV are unaware of their HIV status. Using CD4 counts, we examined how a campaign-based approach to voluntary HIV counseling and testing could improve early access to HIV services including screening for TB.

Methods: To assess feasibility, in September of 2009 the Government of Kenya, a non-governmental organization, a bilateral agency and a private sector company worked together in Kisi District, Nyanza Province, to deliver an integrated prevention campaign. The campaign included voluntary HIV counseling and testing, condoms, a long lasting insecticide-treated bednets, household water filters, and for those testing HIV-positive, a 3-month supply of cotrimoxazole and referrals. Onsite CD4 cell count was done for all persons found to have HIV. A retrospective review of hospital clinic records was done to establish baseline CD4 counts for persons seeking care at the local hospital.

Findings: The three day campaign reached 42031 individuals with a 100% uptake of the multi-disease preventive package. All participants were tested for HIV and 329 (6.3%) tested HIV-positive. Of those HIV-positive, 285 (78%) had CD4 count determined with a median of 366 cells/µL (IQR 350;759) with 32 (13%) having a CD4 count of < 250 cells/µL and 64 (24%) a CD4 cell count < 350 cells/µL. A 6 month retrospective review of 1284 first CD4 counts from Nairobi Hospital records showed a median of 348 (IQR 185;551) with 437 (34%) having a CD4 count of < 250 cells/µL and 646 (50%) a CD4 cell count < 350 cells/µL.

Conclusion: Community-based campaigns likely reach people living with HIV earlier with significant potential prevention and care benefits. Specifically, early access to HIV counseling and testing could be used to offer early WHO recommended TB screening and isoniazid preventive treatment.

Presenting author email: granichr@who.int

WEAE0105 Using national mass immunization campaigns as an opportunity to identify HIV-exposed infants and channel them into follow-up care: experiences from urban Zimbabwe

E. Chirwa1, W. Chandisarewa1, A. Muchedzi1, L. Mupfungura1, J. Keating1, A. Smith2
1Zimbabwe AIDS Prevention Project-University of Zimbabwe, Community Medicine, Harare, Zimbabwe, 2Elisabeth Glaser Pediatric AIDS Foundation, Harare, Zimbabwe, Wake Forest University, North Carolina, United States

Issues: Follow-up of HIV-exposed infants is a key component of the continuum of care in the PMTCT program. However, follow-up and keeping infants in care, is a challenge in Zimbabwe. Despite having HIV specific follow-up clinics in Chitungwiza, only around 35% of HIV-exposed infants enroll into care. Of those enrolled, only 16% were still in care at eighteen months. Provision of a continuum of care is critical to reduce infant mortality and morbidity.

Description: In Zimbabwe, national mass immunization campaigns (NMICs) are used to vaccinate children. Coverage was 99% in Harare in 2009. NMICs were conducted, in which Chitungwiza participated, targeting 48,519 children aged below five years. During the campaign, a team of community mobilizers went out to identify HIV-exposed children using the child health card. Mothers identified as HIV-positive were encouraged to bring their children for follow-up care at the nearest polyclinic in Chitungwiza. Routine data were compiled to compare the uptake of infants in follow-up services before and after the immunization campaign.

Lessons learned: The NMICs achieved coverage of 91% and 95% for measles and polio, respectively. Following the NMICs, the number of infants initiated on cotrimoxazole prophylaxis at four polyclinics increased from 171 (January-June 2009) to 315 (July-December 2009). The number of infants tested for HIV increased from 95 to 188. The Zimbabwe child health card was used as a useful tool to identify HIV-exposed infants. It is feasible to identify HIV-exposed infants during immunization campaigns and channel them into follow-up care.

Next steps: National mass immunization campaigns, which are conducted twice a year, should be considered as an opportunity to actively identify HIV-exposed infants and channel them into follow-up care. This presentation will outline the processes and systems that were put in place for the identification of HIV-exposed infants during the NMICs.

WEAE0201 Total cost and potential cost savings of the national antiretroviral treatment (ART) programme in South Africa 2010 to 2017

G. Meyer-Bahl1, A. Brennan1,2, L. Long1,3, S. Rosen1,3, Y. Pillay4, L. Johnson5, M. Fox1,2,3
1Boston University School of Public Health, Center for Global Health and Development, Boston, United States, 2Health Economics and Epidemiology Research Office, Johannesburg, South Africa, 3University of the Witwatersrand, Faculty of Health Sciences, Johannesburg, South Africa, 4National Department of Health, Pretoria, South Africa, University of Cape Town, Centre for Infectious Disease Epidemiology and Research, Cape Town, South Africa

Background: Due to the pace of scale-up, South Africa’s ART program, with about 980,000 patients the largest in the world, experiences funding and staffing shortages. Methods: We developed a dynamic health-state transition model to calculate the cost of the national ART program and potential cost savings. The model used projections of patients in need of and accessing ART by the ASSA AIDS model and rates of death, loss to follow-up, failure and transition between health states from large Johannesburg ART cohorts (n = 15,502). Data were analysed by CD4 cell stratum and 6-month interval on ART. Per patient cost was estimated at the same clinics and broken down by time on ART (pre-ART, 0-6 months, > 6 months) and type of treatment. Number of patients on ART and total cost in 2010 USD were calculated over 7 financial years (2010/11 to 2016/17). Results: We compared numbers of patients on treatment and total cost for several scenarios (see Table). We included task-shifting and the procurement of drugs at Clinton Foundation ceiling prices. Depending on eligibility criteria, prices by 14-24%.

Conclusion: Total budgetary requirements will continue to increase in South Africa but can be in part offset by changes to staffing and drug procurement.

Presenting author email: gesine@bu.edu

WEAE0202 Rapid feasibility appraisal in Malawi for the introduction of revised WHO ART recommendations 2009

Z. Chirwa1, F. Chimbwandira, N. Njala, E. Mhango, S. Makombe, A. Jahn, A. Maida, E. Schouten
1Ministry of Health, HIV & AIDS Department, Lilongwe, Malawi

Abstract

The rapid appraisal was conducted using desk reviews of available policies, guidelines, ART scale up plans and reports (financial & programmatic). Interviews were conducted with key stake holders. Field visits were conducted to selected ART sites . A SWOT analysis was done...
to determine the programmatic implications of the recommendations

Lessons learned: The earlier CD4 threshold would result in 30-40% more patients being eligible for ART in early stages, compared to a pre-ART approach. This may result in a waiting list due to limited infrastructure & human resource constraints.

Change in regimen will result in doubling or even tripling of the cost of drugs. The appraisal has shown that the additional cost of ARV is alone would reach 200-300 million dollars by 2014 depending on regimen chosen. Guidelines will need to be revised and training conducted on the new guidelines.

Results:

About 200,00-400,000 CD4 tests will need to be performed per year, (currenty 200,000-400,000 Viral loads (currenty 0) to monitor T A R T failure routinely. This has cost/resource implications in terms of equipment, reagents, laboratory personnel (recruitment and training)

Next steps: It may be critical for resource limited countries to conduct a rapid appraisal similar to the above for their national programmes to consider which recommendations to adopt immediately, which ones in a phased or partial manner and which cannot be considered at this time for adoption in the country.

Presenting author email: cjzena@hotmail.com

WEEAO203
The financial implications of the updated WHO adult recommendations for ART in resource-limited settings

L. Bollinger1, C. Avila1, J. Stover1
1 Futures Institute, Glastonbury, United States, \nUNAIDS, Geneva, Switzerland

Background: WHO recently released new treatments for adapting antiretroviral therapy (ART), including eligibility criteria and different antiretroviral (ARV) regimens. The new recommendations may have significant financial implications for resource-limited settings.

Methods: Building on a model that tracks newly infected people as they progress through different levels of CD4 counts, we evaluate the costs for providing ART to those in need of treatment according to different eligibility criteria. For each level of CD4 the costs of care are considered: ARV drugs, laboratory costs, delivery costs and identification (outreach and testing). The cost of drugs is determined from the number of patients on first and second line, the distribution by regimen and the country-specific costs of each regimen. Laboratory costs are calculated separately for new and continuing patients and can vary by regimen. Outreach and testing costs vary primarily by the type of population reached (general population, VCT symptomatic patients, STI or TB patients, pregnant women, high risk populations, health system patients). The model has been applied to all low- and middle-income countries as a group and to several key country individually.

Results: The costs of ART programs to increase coverage to 85% by 2015 for all resource-limited settings would be 57% (ranging between 29%-65% for country-specific estimates) higher with a switch to 350. An additional US$1.5 billion in resources is required for low- and middle-income countries between 2010 and 2015. By 2015, total costs are composed of 43% for ARV, 30% for lab, 16% for service delivery and 12% for outreach and testing.

Conclusions: The new eligibility criteria will require an increase in financial resources required from a societal perspective, although it will provide a significant increase in number of life years gained for people living with HIV.

Presenting author email: lbollinger@futuresinstitute.org

WEEAO204
Scaling up WHO recommendations for HIV therapy in resource-limited settings: what to do first

R. Walfensky1,2, L. Wood, A. Ciaranello1,3, A. Patiel4,5, S. Lorenzen1,6, K. Anglaret1, A. Stoler1, K. Freedberg7
1 Massachusetts General Hospital, General Medicine, Boston, United States, 2 Massachusetts General Hospital, Infectious Disease, Boston, United States, 3Harvard University Center for AIDS Research, Boston, United States, 4University of Cape Town, Cape Town, South Africa, 5Yale School of Medicine, New Haven, United States, 6University of Tbilisi, Tbilisi, Georgia, 7Harvard School of Public Health, Department of Health Policy and Management, Boston, United States

Background: The 2009 WHO HIV treatment guidelines recommend earlier ART initiation (CD4< 350/µl vs. < 200/µl), multiple sequential ART regimens, and replacement of first-line stavudine with tenofovir. We consider what to do first in settings where immediate implementation of all WHO recommendations is infeasible.

Methods: We use a mathematical model and regional input data to project clinical and economic outcomes in a South African HIV-infected cohort (mean age 38.8y, mean CD4 375/µl). We rank - in survival and cost-effectiveness terms - all 12 possible combinations of: 1) stavudine replacement with tenofovir (WHO stage IV); 2) CD4 threshold (< 350/µl); and 3) number of ART regimens available (1, 2, 3). Clinical results are undiscounted; cost-effectiveness results discount life expectancy (LE) and costs 3%/year. The baseline assumption is that patients receive a single, stavudine-based ART regimen, initiated at WHO Stage III/IV (“stavudine/ WHO/one-line”).

Results: Projected baseline survival is 99.1m. Five-year survival is maximized with ART in an earlier stage (CD4 < 350/µl: tenofovir/WHO/one-line: 87% survival) compared with adding 2º-line ART (stavudine/WHO/two-lines; 66%) or substituting tenofovir (tenofovir/WHO/one-line; 67%). Incremental life expectancy gains are maximized via the following stepwise programmatic interventions: stavudine/ < 350/µl/one-line (124.4m); stavudine/ < 350/µl/two-lines (177.2m); and tenofovir/ < 350/µl/one-line (191.5m). Three programs are most cost-effectively: stavudine/ < 350/µl/one-line (cost-effectiveness ratio $610/year of life saved (YLS)), tenofovir/ < 350/µl/one-line (410/YLS), and tenofovir/ < 350/µl/two-lines ($2,230/YLS). These results persist in the presence of plausible variations in point estimates for key variables.

Conclusions: While full and immediate implementation of the WHO recommendations is cost-effective across a variety of international standards, nations with very limited resources should focus first on access to CD4 count monitoring and ART initiation at CD4< 350/µl. The optimal second step is to switch from stavudine to tenofovir, and use a pool of guidelines to provide second-line ART, it is neither effective nor cost-effective to maintain stavudine in first-line regimens.

Presenting author email: nwalesky@partners.org

WEEAO205
Potential impact and cost-effectiveness of the 2009 “rapid advice” PMTCT guidelines - 15 resource-limited countries, 2010

A.F. Audu, O. Bolu, T. Creek, M.L. Lindegren, E. Rivadeneira, H. Dale, R. Sangl, T. Ellerbrock
Centers for Disease Control and Prevention (CDC), Global AIDS Program, Atlanta, United States

Background: The 2009 World Health Organization (WHO) “Rapid Advice” guidelines on prevention of mother-to-child transmission (PMTCT) recommend starting antiretroviral therapy (ART) at earlier disease stages for HIV-infected pregnant women and one of two options for ART-ineligible women. Option “A”, includes maternal zidovudine and lamivudine (dual therapy) pre-natally, and daily infant nevirapine during breastfeeding. Option “B”, includes one of four maternal triple antiretroviral prophylaxis regimens during pregnancy and breastfeeding. WHO recommended dual therapy pre-natally and no breastfeeding prophylaxis for ART-ineligible women.

Methods: Using a deterministic model, we analyzed cost-effectiveness of implementing new guidelines under options “A” or “B” instead of previous guidelines for projected cohorts of HIV-infected pregnant women and exposed infants born in 12 African countries, Guyana, Haiti and Vietnam in 2010. PMTCT-effectiveness data were obtained from “Kesho Bora” and “BAN” randomized trials. PMTCT-coverage and costs were obtained from literature review. Outcome measures included infections averted and life-years gained (LYG) through averted infections. The analytic time horizon for infection risk was pregnancy through breastfeeding. LYG and costs of infant treatment were excluded. Option “A” or “B” was considered highly cost-effective if its incremental cost-effectiveness ratio (ICER) was < US$ 1,463 (the weighted average gross domestic product per capita for the 15 countries). A Monte-Carlo simulation with 10,000 trials constructed 95% confidence intervals (CI).

Results: The ICER of option “A” was US$ 119 (95% CI, 97-128), Option “B” was dominated (i.e. similarly effective but costlier than option “A”). The optimal second step is infeasible.

Presenting author email: aauld@cdc.gov

WEAF01 Yes We Can! Community Advocating for Change

I. Boyko1, Y. Okisuenyi2, D. Kryuk
1-2-3 Ukraine, Network of People Living with HIV/AIDS, Policy and Advocacy Unit, Kyiv, Ukraine, 3 All-Ukrainian Network of People Living with HIV/AIDS, Kyiv, Ukraine

Issues: The Ministry of Health of Ukraine (MoH) stole almost US$4 million on the last ART medicines tender in the summer of 2009. This money could save the lives of 4,000 HIV-positive Ukrainian citizens. MoH continues procuring medicines for the prices 4 times higher than world prices.

Objectives: The All-Ukrainian Network of People Living with HIV/AIDS (Network) together with a famous Ukrainian designer Alexey Zalevsky organized a

WEAF0101 Successful attempt to overcome corruption in state procurements of ARV medicines – advocacy by Ukrainian PLWHAs community

I. Boyko1, Y. Okisuenyi2, D. Kryuk
1,2-3 Ukraine, Network of People Living with HIV/AIDS, Policy and Advocacy Unit, Kyiv, Ukraine, 3 All-Ukrainian Network of People Living with HIV/AIDS, Kyiv, Ukraine

Issues: The Ministry of Health of Ukraine (MoH) stole almost US$4 million on the last ART medicines tender in the summer of 2009. This money could save the lives of 4,000 HIV-positive Ukrainian citizens. MoH continues procuring medicines for the prices 4 times higher than world prices.

Objectives: The All-Ukrainian Network of People Living with HIV/AIDS (Network) together with a famous Ukrainian designer Alexey Zalevsky organized a...
WEAFO102
Enhancing community empowerment: outcomes of a five-year community-led advocacy project in Tamil Nadu, India

M. Shunmugam1, A. Kurian1, X.D. Jenny2
1Indian Network for People Living with HIV/AIDS (INP+), Chennai, India, 2Asia Pacific Council of AIDS Service Organizations (APACOSO), Kuala Lumpur, Malaysia

Lessons learned: This project strengthened partnerships between PLHIV networks and organizations working among marginalized communities through joint advocacy activities - making them realise the importance of building the advocacy capacity of infected and affected communities in enhancing the response to HIV epidemic.

Issues: In Tamil Nadu, PLHIV networks and organizations working among marginalized communities such as Sex Workers, Men who have Sex with Men, Transwomen & Drug Users. Capacities of the community groups need to be strengthened to adequately advocate for their rights and push out desired changes in policies/programs.

Description: Indian Network for People Living with HIV/AIDS (INP+) with support from Asia-Pacific Council of AIDS Service Organizations implemented a five-year project (2005-09) in Tamil Nadu to enhance the advocacy capacity of PLHIV and marginalized communities. Project activities included: conducting capacity building workshops on national/state HIV/AIDS policy analysis; developing community-specific advocacy agendas; advocating against laws criminalizing marginalized groups; positive prevention; media advocacy; and reduced rates for pre-entry health check-up. Advocacy capacity of all district level PLHIV (30) networks in Tamil Nadu and 70 community organizations working with marginalized communities were enhanced. During the project period, PLHIV networks and organizations working among marginalized communities through joint advocacy activities - making them realising the importance of building the advocacy capacity of infected and affected communities in enhancing the response to HIV epidemic.

Next steps: Through various forums, INP+ plans to widely disseminate the lessons learnt from this project emphasizing on the importance of building the advocacy capacity of infected and affected communities in enhancing the responses to HIV epidemic.

WEAFO103
IDU-driven advocacy greatly improves accessibility to methadone in Mengzi county, Yunnan province, China

G. Zhao1, Y. Feng2, G. Cui1, P. Young1
1Mengzi Kangxin Homeland, Mengzi, Yunnan, China, 2Mengzi Kangxin Homeland, Mengzi, Yunnan, China, Health Policy Initiative/Greater Mekong Region and China, Kunming, China; RTI International, Bangalore, India

Lessons learned: 1. Successful advocacy with stigmatized communities is contingent upon a high level of involvement of the representation and implementation of advocacy efforts. 2. Including influential makers in initial and ongoing dialogue enhances the likelihood of success. 3. Collection, presentation and analysis of relevant data are critical for a persuasive campaign.

Next steps: 1. Retire community-based advocacy knowledge and practice advocacy skills. 2. Promote organizational capabilities and build on relationships with relevant government officials. 3. Continue to support awareness of needs of the communities to improve the quality of life for HIV-affected groups.

Lessons learned: Through joint advocacy activities - making them realize the importance of building the advocacy capacity of infected and affected communities in enhancing the responses to HIV epidemic.

Issues: In Tamil Nadu, limited support is available to enhance the policy analysis and advocacy capacity of People Living with HIV (PLHIV) networks and other marginalized communities such as Sex Workers, Men who have Sex with Men, Transwomen & Drug Users. Capacities of the community groups need to be strengthened to adequately advocate for their rights and push out desired changes in policies/programs.

Description: Indian Network for People Living with HIV/AIDS (INP+) with support from Asia-Pacific Council of AIDS Service Organizations implemented a five-year project (2005-09) in Tamil Nadu to enhance the advocacy capacity of PLHIV and marginalized communities. Project activities included: conducting capacity building workshops on national/state HIV/AIDS policy analysis; developing community-specific advocacy agendas; advocating against laws criminalizing marginalized groups; positive prevention; media advocacy; and reduced rates for pre-entry health check-up. Advocacy capacity of all district level PLHIV (30) networks in Tamil Nadu and 70 community organizations working with marginalized communities were enhanced. During the project period, PLHIV networks and organizations working among marginalized communities through joint advocacy activities - making them realising the importance of building the advocacy capacity of infected and affected communities in enhancing the response to HIV epidemic.

Next steps: Through various forums, INP+ plans to widely disseminate the lessons learnt from this project emphasizing on the importance of building the advocacy capacity of infected and affected communities in enhancing the responses to HIV epidemic.

WEAFO104
Barriers and opportunities to the meaningful involvement of people living with HIV in HIV responses in Kenya, Nigeria and Zambia

P. Nweke1, R. Mwaniki1, K. Sikwese2, C. Mallouros3, G. Caswell4
1Network of People Living with HIV and AIDS in Nigeria (NEPHAN), Abuja, Nigeria, 2National Empowerment Centre, Nairobi, Kenya, 3AIDS Healthcare Foundation, Nairobi, Kenya (NEPHAK), Nairobi, Kenya, 4Network of Zambian People Living with HIV (NZP+), Lusaka, Zambia, Global Network of People Living with HIV (GNP+), Amsterdam, Netherlands

Lessons learned: People of HIV living in Kenya conducted interviews with people living with HIV in Kenya (27), Nigeria (25) and Zambia (29) across the public sector, private sector, media, civil society, UNAIDS and CCMs. Using the UNAIDS Report Card, an advocacy tool that measures the application of the GIPA principle, networks of people living with HIV documented barriers and opportunities to engaging people living with HIV in the national HIV response.

Next steps: The impact of resources committed to the HIV response could be increased by building capacity to enable people living with HIV to contribute more fully. To ensure that policies and programmes are acceptable, credible and tailored to the specific needs of key populations, people living with HIV must be meaningfully engaged in the HIV response.

WEAFO105
Getting to grips with the GIPA principle

K. Moody1, F. Pettitt2, C. Steigling3, L. De Pauw3, A. McClelland3, G. Caswell4
1International HIV/AIDS Alliance, Brighton, United Kingdom, 2Spark Public Health Group, Toronto, Canada, 3International HIV/AIDS Alliance, Amsterdam, Netherlands

Lessons learned: Experiences of Programme Officers from countries such as China, Namibia, the Philippines, Ukraine and Zambia facilitated the elaboration of a Guide that helps operationalise the GIPA principle at a practical level. The project conception and monitoring and evaluation when their priorities would drive the agenda for change and when people living with HIV might lend a constructive critique from the grassroots. Networks of people living with HIV identified specific concrete opportunities to effectively engage in national HIV responses, including dialogue between people living with HIV and government and media to discuss and advocate for legislation to protect the rights of people living with HIV, as well as partnerships in the development and implementation of national AIDS plans.

Next steps: The impact of resources committed to the HIV response could be elevated considerably by building capacity to enable people living with HIV to contribute more fully. To ensure that policies and programmes are acceptable, credible and tailored to the specific needs of key populations, people living with HIV must be meaningfully engaged in the HIV response.

Presenting author email: petenweke@yahoo.com
WEAF0201 Gender Inequality and Sexuality: New Solutions for Old Problems?

I am alive! Protecting the sexual and reproductive health and rights of positive women in Jamaica

P.B. Watson, J.L. Crawford
Eve for Life, Kingston, Jamaica

Goal: Positive women able to advocate for their sexual and reproductive health and rights.

Key Gaps Addressed: Limited knowledge about sexual and reproductive health and rights.

Lack of women-centred services in the public health sector for women living with HIV.

Violation of the sexual and reproductive health rights of positive women.

Description: A series of focus group discussions show that the reproductive health rights of women living with HIV who use the public health sector in Jamaica are frequently violated. Information given to women are usually negative – what should not be done. Many positive women have very little knowledge of sexual and reproductive health (SRH) and rights issues. Some are coerced to do tubal ligation, others are told they cannot have sex or children and others are discriminated against.

A multi-pronged advocacy strategy was put in place which focused on empowering newly diagnosed women (0 - 5 years) by teaching them about their reproductive health and rights and basic journalism. Additionally, the women are taught advocacy skills to build their capacity to push for the National HIV/STI Programme and the health care providers to develop and implement policies that address the SRH and rights of positive women.

First time positive women are being taught about SRH and rights. Aim is to ensure they have the tools to protect themselves from re-infections and their rights to sexual and reproductive health and rights are not denied. Knowledge of SRH has increased and women are more confident now to talk talk health provider.

Lessons learned: If women are given the tools to protect themselves their risk taking behaviour will be reduced. Stigma and discrimination in the public health sector still high 28 years after first case diagnosed in Jamaica.

Next steps: Advocacy campaign targeting workers in the public health sector.

Presenting author email: joy.crawford@gmail.com

WEAF0202 Research and advocacy to ensure health and HIV care for HIV-positive women in Chiang Mai women’s prison

P. Suwananawong1, K. Kaplan1, B. Wongjakham2
1Thai AIDS Treatment Action Group (TTAG), Bangkok, Thailand, 2Thai AIDS Treatment Action Group (TTAG), Chiang Mai, Thailand

Background: Most women in Thai prisons are incarcerated on drug-related offenses, and women drugs users with a history of incarceration are five times more likely to be HIV-infected than their counterparts with no history of incarceration. Yet prisons in Thailand still fail to provide comprehensive HIV and harm reduction services including antiretroviral (ARV) therapy for all who need it. Documented studies show that women with HIV are frequently denied treatment, and health care services in general are not equivalent with services outside prison.

Methods: Thai AIDS Treatment Action Group (TTAG) and Chiang Mai University’s Department of Family Medicine conducted qualitative interviews with prison women living with HIV in Chiang Mai Women’s Prison and key government personnel from the Department of Corrections and prison health care services on issues related to the right to health care services and their availability, accessibility and quality in prison.

Results: While Chiang Mai Women’s Prison is recognized for its superior provision of health care services relative to most other prisons across the country, women there reported problems of stigma and discrimination, irregular access to appropriate services and treatment and test results, and denial of opportunistic infection (OI)/ARV treatment to undocumented citizens and migrants, and shortages of treatment.

Conclusions: Thailand’s policy of universal access to comprehensive HIV services including treatment falls short for women living with HIV in prison. The Thai government must urgently promote equal access to voluntary and confidential testing, information, diagnostics and treatment for HIV, and address reported challenges to screening and training/capacity-building needs in order to avoid discrimination in access to comprehensive treatment and services for this highly vulnerable population. Community-based organizations of people living with HIV/AIDS should have increased access to provide peer support and education to women living with HIV/AIDS in prison.

Presenting author email: pasan.suwananawong@gmail.com

WEAF0203 Traditional leaders response to sexual gender based violence (SGBV) in South Africa

E. Tefo-Menziwa1, S. Mullick1, C. Dlamini2
1Population Council, Reproductive Health, Randburg, South Africa, 2Ubuntu Institute, Sandton, South Africa

Issues: Traditional Leaders (TL) are influential in Southern African rural communities. ‘Custodians of African culture’, TL play a key role in advocating HIV and AIDS and SGBV initiatives. They preside over customary law courts and reach communities through “mbuzo’s/elikgotla’s” or community dialogues. National Houses of Traditional Leaders exist in 9 provinces in South Africa and they are officially recognized representatives. They are key partners in HIV and AIDS interventions but untapped in terms of SGBV. In order to strengthen community based initiatives and to understand the potential role of TL in the prevention of SGBV a series of workshops were held in three provinces.

Description: The workshops were conducted in rural areas with high SGBV and HIV prevalence in KwaZulu Natal, Limpopo and North West province. Workshops provided information on the state of SGBV in individual provinces, need for a multi-sectoral approach and TL role in SGBV prevention and management.

Lessons learned:

§ TL are uninformed of SGBV epidemic drivers
§ Female TL remain untaught resources to expand services for young girls.
§ TL are not linked to justice system and police to deal with survivors and perpetrators
§ TL do not have guidelines, culturally specific training curricula and information on SGBV

Next steps: Traditional courts play a limited role in adjudicating SGBV cases

WEAF0204 Development of user-friendly HIV prevention services for former women inmates in Taldykorgan, Kazakhstan

S. Saduakasova
PF Hope Rehabilitation Centre, NGO, Taldykorgan City, Kazakhstan

Issues: Women who are newly released from prison require social, psychological and medical assistance. Many of these women are former or current users of injecting drugs (IDUs), and have often lost contact with friends and relatives. Support in realising their life goals and reducing the risk of HIV and STIs is particularly important during the transition stage.

Description: The rehabilitation model for newly released female prisoners, including PLHIV and IDUs, comprises social reintegration programmes and work rehabilitation at the Hope Centre in Taldykorgan. Activities are based on a partnership agreement between the centre and the Justice Department of the Almaty Region. AIDS Foundation East-West (AFEW) provides technical support to the project. The project provides services to 75 former women inmates. On arrival at the centre, clients are placed in one of three streams: treatment, post-rape care or one-stop shop. This stream provides HIV and sexual health counselling, gynaecological services, overnight accommodation, client management, prevention tools, informational materials, education and career advice. Ten clients are employed on a temporary basis at the centre’s in-house sewing workshop, while two clients have become permanent employees. Ten clients are currently employed on a temporary basis at the centre’s in-house sewing workshop, while two clients have become permanent employees.

Lessons learned: Effective HIV prevention for this group is not possible without meeting the basic needs for housing, food and work. Client management systems are highly effective in ensuring universal access to services.

Next steps: The Hope Centre provides user-friendly services, a safe environment and confidential counselling to its clients, enabling them to reintegrate into society. The successful model established by this centre should be unrolled in other cities of Kazakhstan.

Presenting author email: fzs@mail.ru

WEAF0205 Identifying barriers to treating rape in Eastern DR Congo: increasing support to local NGOs as a means to improve post-rape care

T. Marcan
London School of Hygiene & Tropical Medicine, Gender Violence & Health Centre, Department of Public Health & Policy, London, United Kingdom

Background: WHO guidelines outline post-rape health services in conflict settings that mitigate the related ill-health effects, including HIV/AIDS. While international resources have been allocated to provide post-rape health services in eastern DR Congo, practitioners report that survivors are not receiving quality care. This study aimed to evaluate implementation of the WHO guidelines among health sector providers and to identify the main barriers to post-rape treatment provision.

Methods: A comprehensive literature review identified four possible barriers to treating rape in conflict: (i) insecurity; (ii) lack of trained health personnel; (iii) insufficient funding; and (iv) lack of data related to rape.

Abstract Book Volume 2 | www.aids2010.org
WEAX0103 Safety of tenofovir use during pregnancy: associations with low birth weight and early growth in HIV-exposed uninfected infants


1NH, NICHD/PAMA Branch, Bethesda, United States, 2Harvard School of Public Health, Department of Biostatistics, Boston, United States, 3State University of New York Downstate Medical Center, Department of Pediatrics, Brooklyn, United States, 4Harvard School of Public Health, Department of Epidemiology, Boston, United States, 5Harvard School of Public Health, Center for Biostatistics in AIDS Research, Boston, United States, 6University of Illinois at Chicago, Department of Pediatrics, Chicago, United States

Background: Tenofovir disoproxil fumarate (TDF) is recommended as part of first-line combination antiretroviral (ARV) therapy for adults, and its use in pregnant women has been rapidly increasing. However, results of animal studies have raised concerns regarding potential adverse effects of maternal TDF on fetal growth.

Methods: The PHACS Surveillance Monitoring of Antiretroviral Toxicity (SMARTT) study enrolls HIV-exposed uninfected children in the US with antiretroviral pregnancy registry data to follow-up to examine potential adverse effects of in utero ARV exposure.

We evaluated the association of TDF exposure during pregnancy with low birth weight (LBW, < 2.5kg) and infant growth at 1 year of age based on z-scores (< -1.5 for length, weight, and head circumference (HC)). Logistic regression models for LBW and growth outcomes were fitting, adjusting for demographic and socioeconomic characteristics, maternal health status (CD4 < 250, viral load<1000 copies/mL) and substance use during pregnancy.

Results: 1855 children were enrolled in the SMARTT study in 2010 and had ARV information available. 380 (20%) were exposed to TDF in utero, decreasing from 15% in 2003 to 38% in 2010. Exposure to TDF was no increased risk of LBW for infants exposed vs unexposed to TDF (21.2% vs 19.5%, p=0.46), and there remained no TDF exposure and/or other factors (adjusted odds ratio (aOR)=1.03, 95% CI: 0.81, 1.28, p=0.56).

However, among 470 1-year-olds, those exposed to TDF had marginally increased risk of low length and weight z-scores, while 1st trimester TDF exposure was associated with significantly increased risk of low HC z-score (aOR=2.48, 95% CI:1.17, 5.27, p=0.02).

Conclusions: TDF use during pregnancy is common and increasing but does not appear to increase the risk for low birth weight. However, TDF may slow infant growth; further infant follow-up studies are warranted for monitoring the safety of TDF exposure during pregnancy.

Presenting author email: siberyn@mail.nih.gov

WEAX0104 Monitoring birth defects among HIV-positive, ART exposed pregnant women: 20 years of antiretroviral pregnancy registry data

V. Vaniprapassag1, J. Albano2, H. Tilton2, A. Scheuerle3, K. Beckerman3, D. Seekins4, S. Storfer5, N. David6, H. Watts6

1GlaxoSmithKline, WorldWideEpidemiology, Research Triangle Park, United States, 2Kendle International Inc, Durham, United States, 3UNC School of Public Health, Chapel Hill, United States, 4Tesserae Genetics, Dallas, United States, 5Albert Einstein College of Medicine, Bronx, United States, 6Bristol-Myers Squibb Company, Plainsboro, United States, 7Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, United States, 8Aurobindo Pharma Ltd., Dayton, United States, 9National Institutes of Health, Bethesda, United States

Background: Antiretroviral (ARV) therapy has been instrumental in reducing mother-to-child transmission of HIV. The Antiretroviral Pregnancy Registry (APR) is an ongoing international registry that monitors prenatal exposures to ARV drugs to detect potential increases in risk for birth defects through prospective exposure-registration cohort

Methods: Clinicians prospectively register pregnant women with prenatal exposures to any ARV before the outcome is known, report data on exposure throughout pregnancy, and provide birth outcome data. Birth defect prevalence is compared to both internal and external comparator groups. The external comparator is a population-based surveillance system and internal comparators include exposures during 2nd or 3rd trimester of pregnancy relative to 1st trimester. Statistical inference is based on exact methods for binomial proportions. APR has 80% power and Type 1 error rate of 5% to detect doubling of risk for overall birth defects

Results: From January 1989 through July 2009, the APR has monitored 10803 birth exposures to ARVs with 288 birth defects identified for an overall prevalence of 2.7% for 100 live births (95% CI 2.4-3.0). Among the 4702 first trimester ARV exposures, 134 outcomes with defects were reported for a prevalence of 2.8% (95% CI 2.4-3.4). This rate is not significantly different from the population based surveillance system (2.7%, 95% CI=2.68-2.76) or the internal comparator of 2nd or 3rd trimester exposures (2.5%, 95% CI=2.2-3.0) (prevalence ratios), 14. 95% CI=0.90-1.43).

Conclusions: For overall population exposed to ARVs in this Registry, no increases in risk of overall birth defects or specific defects have been detected to date when compared with observed rates in population-based birth surveillance systems or when 1st trimester ARV exposure rates are compared to those with second or third trimester exposure. In analyzing individual drugs with sufficient data to warrant separate analysis, no increases in risk of concern have been detected.

Author Index

V. Vaniprapassag1, J. Albano2, H. Tilton2, A. Scheuerle3, K. Beckerman3, D. Seekins4, S. Storfer5, N. David6, H. Watts6

WEAX0103 Safety of tenofovir use during pregnancy: associations with low birth weight and early growth in HIV-exposed uninfected infants


1NH, NICHD/PAMA Branch, Bethesda, United States, 2Harvard School of Public Health, Department of Biostatistics, Boston, United States, 3State University of New York Downstate Medical Center, Department of Pediatrics, Brooklyn, United States, 4Harvard School of Public Health, Department of Epidemiology, Boston, United States, 5Harvard School of Public Health, Center for Biostatistics in AIDS Research, Boston, United States, 6University of Illinois at Chicago, Department of Pediatrics, Chicago, United States

Results: 1855 children were enrolled in the SMARTT study in 2010 and had ARV information available. 380 (20%) were exposed to TDF in utero, decreasing from 15% in 2003 to 38% in 2010. Exposure to TDF was no increased risk of LBW for infants exposed vs unexposed to TDF (21.2% vs 19.5%, p=0.46), and there remained no TDF exposure and/or other factors (adjusted odds ratio (aOR)=1.03, 95% CI: 0.81, 1.28, p=0.56).

However, among 470 1-year-olds, those exposed to TDF had marginally increased risk of low length and weight z-scores, while 1st trimester TDF exposure was associated with significantly increased risk of low HC z-score (aOR=2.48, 95% CI:1.17, 5.27, p=0.02).

Conclusions: TDF use during pregnancy is common and increasing but does not appear to increase the risk for low birth weight. However, TDF may slow infant growth; further infant follow-up studies are warranted for monitoring the safety of TDF exposure during pregnancy.

Presenting author email: siberyn@mail.nih.gov

WEAX0104 Monitoring birth defects among HIV-positive, ART exposed pregnant women: 20 years of antiretroviral pregnancy registry data

V. Vaniprapassag1, J. Albano2, H. Tilton2, A. Scheuerle3, K. Beckerman3, D. Seekins4, S. Storfer5, N. David6, H. Watts6

1GlaxoSmithKline, WorldWideEpidemiology, Research Triangle Park, United States, 2Kendle International Inc, Durham, United States, 3UNC School of Public Health, Chapel Hill, United States, 4Tesserae Genetics, Dallas, United States, 5Albert Einstein College of Medicine, Bronx, United States, 6Bristol-Myers Squibb Company, Plainsboro, United States, 7Boehringer Ingelheim Pharmaceuticals, Inc., Ridgefield, United States, 8Aurobindo Pharma Ltd., Dayton, United States, 9National Institutes of Health, Bethesda, United States

Background: Antiretroviral (ARV) therapy has been instrumental in reducing mother-to-child transmission of HIV. The Antiretroviral Pregnancy Registry (APR) is an ongoing international registry that monitors prenatal exposures to ARV drugs to detect potential increases in risk for birth defects through prospective exposure-registration cohort

Methods: Clinicians prospectively register pregnant women with prenatal exposures to any ARV before the outcome is known, report data on exposure throughout pregnancy, and provide birth outcome data. Birth defect prevalence is compared to both internal and external comparator groups. The external comparator is a population-based surveillance system and internal comparators include exposures during 2nd or 3rd trimester of pregnancy relative to 1st trimester. Statistical inference is based on exact methods for binomial proportions. APR has 80% power and Type 1 error rate of 5% to detect doubling of risk for overall birth defects

Results: From January 1989 through July 2009, the APR has monitored 10803 birth exposures to ARVs with 288 birth defects identified for an overall prevalence of 2.7% for 100 live births (95% CI 2.4-3.0). Among the 4702 first trimester ARV exposures, 134 outcomes with defects were reported for a prevalence of 2.8% (95% CI 2.4-3.4). This rate is not significantly different from the population based surveillance system (2.7%, 95% CI=2.68-2.76) or the internal comparator of 2nd or 3rd trimester exposures (2.5%, 95% CI=2.2-3.0) (prevalence ratios), 14. 95% CI=0.90-1.43).

Conclusions: For overall population exposed to ARVs in this Registry, no increases in risk of overall birth defects or specific defects have been detected to date when compared with observed rates in population-based birth surveillance systems or when 1st trimester ARV exposure rates are compared to those with second or third trimester exposure. In analyzing individual drugs with sufficient data to warrant separate analysis, no increases in risk of concern have been detected.

Author Index

V. Vaniprapassag1, J. Albano2, H. Tilton2, A. Scheuerle3, K. Beckerman3, D. Seekins4, S. Storfer5, N. David6, H. Watts6

Abstract Book Volume 2 | www.aids2010.org
WEAX0105
Preterm Birth (PTB), low birth weight (LBW) and fetal antiretroviral (ARV) exposure: Gestational age (EGA) and birth weight data from 10022 singleton live births (LB) reported to the Antiretroviral Pregnancy Registry (APR) 1989 through 31 January 2009

K. Beckerman1, J. Albano2, M. Martinez-Tristani3, D. Seekins4, S. Storfer5, N. David6, V. Vannappagari7, D.H. Watts8, A. Scheurle9, H. Tilson10
1Albert Einstein College of Medicine, Obstetrics & Gynecology and Women’s Health, Bronx, United States, 2Kendle International, Inc., Antiretroviral Pregnancy Registry, Wilmington, United States, 3Abbott Laboratories, Global Pharmaceutical R&D, Miami, United States, 4Bristol-Myers Squibb, HIV Medical Strategy, Plainsboro, United States, 5Boehringer Ingelheim Pharmaceuticals, Inc, Medical Affairs, Ridgefield, United States, 6Aurobinda Pharmaceuticals, Ltd, Andhra Pradesh, Israel, 7GlaxoSmithKlein, Epidemiology, Chapel Hill, United States, 8National Institutes of Health, Pediatric, Adolescent, Maternal AIDS Branch, Rockville, United States, 9Tesserae Genetics, San Antonio, United States, 10University of North Carolina, School of Public Health, Chapel Hill, United States

Background: Reports from several cohorts of ARV-exposed newborns suggest increased prevalence of PTB and LBW associated with protease inhibitor (PI) exposure, while others do not. We examined BW and estimated gestational age of live births reported to APR, an ongoing pregnancy exposure registry.

Methods: APR uses a prospective exposure-registration cohort design. Providers register pregnant women with prenatal exposures to ARV and later provide birth outcome data. We compared prevalence of PTB< 37 weeks gestation(wk),< 32wk, BW< 2500g, and BW< 1500g among infants exposed to 1ARV, ≥2ARV(combo), combo without(no)PI and combo+PI.

Results: 9513(95%) of LB were available for analysis. We found no differences between the 1404 exposed to 1ARV and the 8109 exposed to comboARV in prevalence of either PTB< 37w (14.7%,13.0%) or BW< 2500g (15.4%,16.1%). Among the comboARV exposures, PTB< 37wk was higher among +PI(14.1%) than noPI(11.8%)p=0.03, as was BW< 2500g(p=0.001). PTB< 32wk was not different among the 4658 exposed to combo+PI(2.3%) than among the 3451 combo noPI (1.8%)p=0.16. BW< 1500g was more prevalent in combo+PI(14.0%) than combo noPI(10.4%). After controlling for race, BW< 1500g for each exposure group overlapped population prevalence. Furthermore, when compared to 1ARV, combo+PI showed no difference in BW< 1500g and was protective against PTB< 32wk(p=0.05). Finally, BW< 1500g was lower in all combo exposure groups than published reports(Cooper, 2006) of cohorts of HIV-exposed neonates with no ARV exposure.

Conclusions: Optimized comboARV offers profound benefit to maternal survival and vertical transmission prevention. APR data show no difference in PTB and BW< 2500g between neonates exposed to 1 ARV and comboARV. BW< 1500g was higher among combo+PI than combo noPI, but equal to 1 ARV, and significantly lower than noARV historic controls. We hypothesize that exposure to PI could be a surrogate marker for immunologic and other factors contributing to preterm parturition and low BW syndromes in HIV-exposed neonates.

Presenting author email: beckerman1@aol.com
**WEPDA1 Viral Persistence and Latency**

**WEPDA101** Persistent low-level viremia despite clinically successful antiretroviral therapy appears to be correlated with more frequent resting CD4+ T cell infection.

N. Archin1, J. Anderson1, K. Keedy1, K. Barton1, M. Cheema1, R. Sackmann1, A. Wagner1, J. Kuruc1, J. Eron1, M. Cohen1, J. Coffin1, R. Swanstrom1, D. Margolick1

1The University of North Carolina, Medicine, Chapel Hill, United States, 2NCI HIV Drug Resistance Program, Frederick, United States

**Background:** Resting cell infection (RCI) is established during acute HIV infection (AHI). Low-level viremia that is detectable only with research assays is observed in roughly 75% of patients successfully suppressed by antiretroviral therapy (ART). A potential source of this viremia is RCI. We hypothesized that low-level viremia would be more frequently detected by a single-copy assay (SCA; Palmer 2003) in patients with more frequent RCI.

**Methods:** Aviremic patients stably on ART (< 50 HIV RNA copies/ml for > 6 months) underwent leukopheresis. Resting CD4+ T cells were isolated, HIV p24 antigen measured in limiting dilution outgrowth assays, and the frequency of RCI calculated using a maximum likelihood method (Archin 2008). Low-level viremia was measured by SCA. Single genome amplification (SGA) and sequencing was performed on plasma HIV RNA and RNA from outgrowth assays.

**Results:** As infected resting CD4+ T cells per billion (SUPB) increased so did the frequency of detection of low-level viremia by SCA above the limit of detection of 1 copy/ml. Intermittent episodes of viremia > 50 copies/ml (“bips”) were also observed more frequently in patients with higher SUPB. Few SGA sequences from plasma RNA could be obtained, but were similar to a subpopulation of the diverse sequences recovered from resting cell outgrowth RNA.

**Conclusion:** Although several cellular sources may contribute to persistent, low-level viremia despite ART, our findings are consistent with the hypothesis that the primary source of this viremia is intermittent expression of provirus from latently infected CD4+ T cells.

Presenting author email: nancy_archin@unc.edu

---

**WEPDA102** Assessment of residual HIV-1 viremia and persistent viral replication in highly suppressed patients: comparison of direct and indirect methods.

B. Hernandez-Nova1, N. Madrid2, A. Vallejo2, C. Gutierrez2, L. Diaz2, M. Abadi2, E. Dominguez2, V. Dahl3, R. Rubio1, E. Navas1, J. Zamora1, H. Valdez1, S. Palmer1, M.A. Muñoz-Fernandez2, S. Moreno1

1Hospital Ramon y Cajal, Madrid, Spain, 2Hospital General Universitario Gregorio Maranon, Madrid, Spain, 3Swedish Institute Of Infectious Diseases Control and Karolinska Institute, Stockholm, Sweden, 4Hospital Dace de Octubre, Madrid, Spain, 5Pfizer Inc., New York, United States

**Background:** Direct (Single Copy Assay-SCA) and indirect (2-LTR-DNA detection and immune activation) methods have been used to measure residual viremia (RV) and whether replication continues during intensification of HAART. However, results have been contradictory and further comparisons of these methods are needed.

**Methods:** Clinical trial (NCT00795444) of maraviroc-intensification in chronically HIV-1-suppressed adults. All techniques were applied at baseline and at weeks 12 and 24 post-MVC. RV was measured by SCA. Enriched episomal 2-LTR-DNA from PBMCs was detected by a nested-PCR flanking the junction area. Immune activation was measured on CD3+CD4+CD38+HLA-DR+.

**Results:** After 24w-MVC-intensification all patients remained with undetectable VL.

<table>
<thead>
<tr>
<th>Patient</th>
<th>SCA BL</th>
<th>SCA w12</th>
<th>2-LTR BL</th>
<th>2-LTR w12</th>
<th>2-LTR w24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.3</td>
<td>1.0</td>
<td>4.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2</td>
<td>&lt; 0.3</td>
<td>&lt; 0.3</td>
<td>&lt; 0.3</td>
<td>&lt; 0.3</td>
<td>&lt; 0.3</td>
</tr>
<tr>
<td>3</td>
<td>&lt; 0.3</td>
<td>&lt; 0.4</td>
<td>&lt; 0.4</td>
<td>&lt; 0.4</td>
<td>&lt; 0.4</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 0.3</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>5</td>
<td>&lt; 0.3</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>6</td>
<td>&lt; 0.3</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>7</td>
<td>&lt; 0.3</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**[Detailed results]**

Significant changes were observed at w12 (p=0.02) for SCA and at both time-points for 2-LTR-DNA detection (p=0.037 and p=0.012, respectively). Agreement between both techniques was poor (Kappa=0.115). A decrease in the median proportion of CD3+CD4+CD38+HLA-DR+ was observed at w24 which was not statistically significant (1.6%, IQR:1.1-2.3; 2.9%, IQR:2.5-3.3 at BL).

**Conclusions:** There was no correlation in the results obtained by the three methods used to measure RV and persistent viral replication. However, the reduction in CD4-T-cell activation, transient increase in RV, and increase in 2-LTR-DNA at w24 suggests that MVC intensification is affecting RV and viral reservoirs by several different mechanisms that warrant further research.

Presenting author email: bhernando.hrc@salud.madrid.org

---

**WEPDA103** Impact of short term HAART on SIV infection of the male genital tract.

M. Moreau1, A. Le Tortorec1, H. Denis1, C. Deleage1, A.-P. Satie1, O. Bourny2, P. Roques1, B. Jégou1, R. Le Grand1, N. Deluque-Rainsford1

1INSERM U925, Rennes, France, 2Immunovirology, CEA, Fontenay-aux-Roses, France

**Background:** We previously showed that several male genital organs are infected by HIV/SIV and thus likely to fuel semen with infectious viral particles and infected cells (Le Tortorec et al, Plos One 2008; Le Tortorec et al, Retrovirology, 2008; Roulet et al, Am J Pathol, 2006). To investigate whether HIV shedding in the semen of HIV+ men under effective HAART could result from residual production within the male genital tract (MGT), we analyzed the infection of MGT organs of SIV+ macaques following short term HAART.

**Methods:** Cynomolgus macaques were treated with AZT/TDF/DRV for 2-4 weeks at 21 weeks post-intravenous inoculation of SIVmac251. SIV DNA and RNA as well as replicating virions were searched in the MGT organs by nested PCR for SIV gag DNA, tat/rev RNA and in situ hybridization for gag RNA. Results: The average frequency of SIV DNA detection in the testis, epididymis, prostate and seminal vesicles from the five treated animals was similar to that of placebo animals. In two animals in which HAART induced undetectable viremia, viral DNA detection was decreased in all MGT organs apart from the testis. However SIV gag RNA+ cells persisted in all tissues and multiply spliced SIV RNA encoding tat/rev was observed.

**Conclusions:** When undetectable viremia is achieved, short term HAART reduces SIV infection of all MGT organs apart from testis. However, low level of viral replication is still evidenced in all organs. Whether prolonged HAART can eradicate SIV from the MGT is under investigation.

Presenting author email: nathalie.deluque-rainsford@insERM.fr
WEPPA104
Rpr6 represses transcription from the HIV-1 promoter
X. Contreras, E. Rousett, R. Kieman
TGH, CNRS, Montpellier, France

Background: The reservoir of human immunodeficiency virus type 1 (HIV-1) latent infection in T-cells may be a major therapeutic challenge preventing the eradication of virus from infected individuals. Latency is mainly established at the transcriptional level where repression of viral gene expression and NFAT5-dependent heterochromatin formation have critical roles. Ribosomal RNA-processing protein 6 (Rpr6) is the catalytic subunit of nuclear exosome, a complex consisting of 13 distinct subunits that plays a role in RNA quality control. Nuclear exosome is recruited to transcriptionally active heat shock protein genes where it has been proposed to link mRNA surveillance to transcriptional elongation. Interestingly, a role in transcriptional silencing at heterochromatin was demonstrated in yeast. The objective of our research is to characterize the role of Rpr6 in transcriptional regulation and its possible implications in HIV latency.

Methods: The ability of Rpr6 to activate HIV-1 transcription was tested using either siRNA transfection or S-Fluorouracil (S-FU) treatment of HIV-LTR luciferase cells. Presence of Rpr6, RNA polymerase II and histone modifications on HIV chromatin was analyzed using ChIP assays.

Results: Rpr6 depletion significantly activated transcription from the HIV-1 LTR. Similarly, S-FU, an inhibitor of Rpr6 and a widely used chemotherapeutic, also activated transcription from the HIV-1 LTR. Rpr6 physically associates with HIV-1 chromatin and Rpr6 depletion is accompanied by increased recruitment of RNA polymerase II and histone modifications characteristic of transcription activation. Interestingly, Rpr6 associates with TAR RNA, and exerts exoribonuclease activity toward TAR in vitro. Furthermore, transfection of exogenous TAR RNA in vivo repressed HIV-1 transcription in cells containing wild-type levels of Rpr6.

Conclusions: Our studies show that Rpr6 is involved in transcriptional repression of HIV-1 via a novel mechanism involving HIV-1 TAR RNA. The results provide a better understanding of the molecular basis of HIV-1 latency and point to the potential avenues of therapeutic intervention to purge the latent reservoir.

Presenting author email: xavier.contreras@tgh.cnrs.fr

WEPPA105
Homeostatic proliferation of memory T-cells and expansion of the HIV-1 latent reservoir
A. Bosque, V. Planelles
University of Utah, Pathology, Salt Lake City, United States

Background: Homeostatic proliferation is the ability of T cells to divide in the absence of activation, and is triggered by IL-7. It is conceivable that the latent viral reservoir may arise from a perpetuated or expanded homogeneous population of memory T cells.

Methods: We describe a system whereby naive cells from peripheral blood are induced to undergo normal development ex vivo in the presence of the appropriate cytokine cocktails and antigen stimulation through CD3/CD28.

Results: These cells are infected while in the activated state, and return to quiescence as central memory cells (Tcm). Infection of these ex-vivo-generated memory cells leads to latency with a high frequency and results in the formation of a polyclonal population of integrated viruses. Using this paradigm, we have evaluated the effects of homeostatic proliferation of T cells on HIV-1 latency.

Conclusions: We have examined the influence of cell cycle on viral reactivation events in T-cells harboring latent proviruses that are incapable of cell division without viral reactivation when incubated in the presence of IL-2 or IL-7. We have also observed that a combination of IL-2 and IL-7 induces a persistent viral reactivation (20% of that with antiCD3/antiCD28). While IL-2+IL-7 treatment induces inefficient reactivation, this cytokine cocktail fails to activate cellular proliferation. Under the above conditions, net effect of IL-2+IL-7 treatment is an expansion, not a contraction, of the latent reservoir. We have also examined the effect of IL-7 on p21 expression and found that it may have both negative and positive effects on HIV-1 reactivation upon IL-2+IL-7 incubation and found that it is both NFAT and NFκB independent.

Conclusions: We conclude that IL-7 induces suboptimal viral reactivation but vigorous cellular proliferation. Under the above conditions, the net effect of IL-2+IL-7 treatment is an expansion, not a contraction, of the latent reservoir. We have also examined the effect of IL-7 on p21 expression and found that it may have both negative and positive effects on HIV-1 reactivation upon IL-2+IL-7 incubation and found that it is both NFAT and NFκB independent.

Presenting author email: vicente.planelles@path.utah.edu

WEPPA202
X4, but not R5, HIV gp120 potentiates type 2 EBV mediated B cell transformation
S. Iyengar, D. Schwartz
Hackensack University Medical Center, Research, Hackensack, United States

Background: Non-Hodgkin’s B cell lymphomas (NHL) are significantly increased among HIV+ individuals, especially late in disease. AIDS related CNS derived NHL are typically negative for EBV, while LA-NHL (NHL requiring in the context of HIV infection is unclear. We reasoned that X4 envelope might stimulate B cells via an aberrant CXCR4 - ligand axis that has been described for several cancers.

Methods: Normal T cell depleted B cells (100,000 / well in replicates of 10 per group) were exposed to Type 2 EBV gp120. Rpr6 depletion signifi cantly activated transcription from the HIV-1 promoter in cells containing wild-type levels of Rpr6.

Conclusions: Our studies show that Rpr6 is involved in transcriptional repression of HIV-1 via a novel mechanism involving HIV-1 TAR RNA. The results provide a better understanding of the molecular basis of HIV-1 latency and point to the potential avenues of therapeutic intervention to purge the latent reservoir.

Presenting author email: siyengar@fastmail.fm

WEPPA203
A role for Cdk9 in endothelial cell survival and angiogenesis following treatment with proangiogenic factors or the Kaposi’s sarcoma-associated herpesvirus encoded G-protein coupled receptor
H. McFerrin1, D.E. Sullivan1, M. Angelova1, A. Betancourt1, C. Morris1, G.F. Morris1, B. Shelby2
1Xavier University of Louisiana, Department of Biology, New Orleans, United States, 2Department of Pathology, Tulane University School of Medicine, New Orleans, United States, 3Program in Lung Biology, DVD/MMRHLB/Herpesvirus Team, Atlanta, United States

Background: Vascular endothelial cell (EC) survival is essential for the growth and metastasis of solid tumors. Treatment with angiogenic factors increases the expression of Bcl-2, a prosurvival factor, in EC. Kaposi’s sarcoma-associated herpesvirus (KSHV) has been identified as the etiologic agent of Kaposi’s sarcoma (KS). In its most aggressive form, KS is a highly vascularized neoplasm that is the most common malignancy associated with acquired immunodeficiency syndrome (AIDS). Experimental evidence suggests that the KSHV-encoded G-protein coupled receptor (vGPCR) is required for and sufficient to initiate angiogenesis and tumorogenesis. Cdk9, a cellular cofactor required for transcription of full-length HIV RNA, promotes transcription elongation by phosphorylating RNA polymerase II. We hypothesized that pharmacological or genetic inhibition of Cdk9 would inhibit KSHV vGPCR-induced angiogenesis by downregulating the expression of angiogenic growth factors and/or Bcl-2.

Methods: HUVEC were serum-starved and treated with PMA or with bFGF and VEGF. These angiogenic factors slightly increased Cdk9 activity in EC increased following treatment with bFGF and VEGF. Cdk9 activity was inhibited with flavopiridol or by treatment of cells with a retroviral dominant negative Cdk9 (CDK9DN). To determine whether Cdk9 was required for the angiogenic properties of KSHV vGPCR, cellular isolates were transfected with a retroviral vector expressing vGPCR and GFP or GFP alone. Cdk9 activity was determined by measuring a phosphorylation-dependent following inhibition with flavopiridol.

Results: Inhibition of Cdk9 decreased Bcl-2 expression and survival of EC in vitro and angiogenesis in vivo. Cdk9 activity in EC increased following treatment with bFGF and VEGF or PMA. These angiogenic factors slightly increased
WE PD A204
Levels of IL-18, sCD14 and CCL2, CXCL8 and CXCL10 in tubercular immune restoration disease in a North Indian population
M. Kumar1, M. Jain1, B. Oliver2, A. Kumar3, U. Agarwal3, P. Price3, S. Singh1
1All India Institute of Medical Sciences, Laboratory Medicine, New Delhi, India, 2University of Western Australia, Pathology and Laboratory Medicine, Perth, Australia, 3LRS Institute of Respiratory Disease, New Delhi, India

Background: The pathogenesis of Immune Restoration Diseases (IRD) in HIV patients infected with tuberculosis (TB) is poorly understood. We hypothesized that dysregulation of immune mediators during ART may exacerbate TB. Interleukin-18 (IL-18) is produced by monocytes stimulated with lipopolysaccharide (LPS) and drives a Th1 response. CD14 is the major LPS-binding protein of monocytes. Its plasma levels are elevated during disease. IL-8 (CXCL8) is chemotactic for T-cells, NK cells and neutrophils. MCP-1 (CCL2) is another chemokine which aids in recruitment of monocytes to the site of infection, whilst IP-10 (CXCL10) is involved in the recruitment of effector T-cells.

Methods: Plasma samples were collected from 62 Indian patients starting ART with < 200 CD4 T-cells/μL in New Delhi. All patients received anti-tuberculosis therapy prior to ART. 19 patients (31%) had TB IRD and 43 were recruited as non-IRD controls. Plasma IL-18, sCD14, CXL2, CCL2 and CXCL8 were measured by ELISA. The timepoint nearest to the median time of IRD (270-220 days) was selected for each non-IRD patient for the analysis.

Results: Plasma IL-18 and sCD14 levels were similar in all patients at baseline and week 4. IL-18 and sCD14 levels were higher during an IRD state compared to baseline (p=0.050), but did not rise significantly in non-IRD patients. CCL2 and CXCL8 were lower in IRD patients than non-IRD patients at baseline (p=0.028 and p=0.012 respectively). CXCL8 was higher in non-IRD patients at week 4 compared to baseline (p=0.023). CXCL10 levels remained higher in non-IRD at both time points than IRD.

Conclusions: The increased levels of IL-18 and sCD14 in HIV-TB IRD suggest a role for the monocyte response to bacterial motifs in the pathogenesis of TB IRD. The inflammatory response at baseline may also promote IRD. Further research is required to evaluate these molecules as prognostic markers.

Presenting author email: kmohanpaul@gmail.com

WE PD A205
Impact of active tuberculosis on the immune recovery of HIV-infected individuals receiving HAART
H.Y. Tan1, Y.K. Yong1, L.Y. Ong1, Y.M. Lee1, S.F.S. Omar1,2, S. Shashheel1,2, K.K. Panjaitan1, A. Kamarulzaman1
1University Malaya, Centre of Excellence for Research in AIDS (CERIA), Kuala Lumpur, Malaysia, 2University of Malaya Medical Centre, Infectious Disease Unit, Kuala Lumpur, Malaysia, 3University of Malaya Medical Centre, Respiratory Unit, Department of Medicine, Kuala Lumpur, Malaysia

Background: Mycobacterium tuberculosis (MTB) is known to modulate the host immune response but its effects on immune recovery in HIV-TB co-infected patients remain unclear. In this study we aim to elucidate the impact of MTB infection on the recovery of immune responses in HIV-patients beginning HAART.

Methods: HIV +ve patients with severe immunodeficiency beginning HAART at UMMC were enrolled into a prospective Immune Reconstitution study since 2006. We identified a subset of patients with MTB coinfection for this study. Subjects were divided into 3 groups: A) HIV (+) TB (-); n=14, B) HIV (+) TB (+); n=9 and C) healthy controls; n=26. PBMC and serum of these subjects were assessed longitudinally for 48 weeks. PBMCs were stimulated with PPD and IFNγ releases by T-cells were assayed by ELISPot. Serum markers anti-PPD IgG, STNFIR, IL18, sCD14, sCD30 and IP10 were measured by ELISA.

Results: Median levels of all serum markers for all group B patients were elevated at the beginning of treatment and declined gradually. Meanwhile most of the serum markers for group A patients showed no elevation and returned to normal. Recovery of CD4 T-cell counts for groups A and B were similar. Group A patients managed to achieve viral suppression < 50 copies/ml at week 12 (p=0.0138), whilst only 50% of group B patients achieved that at week 48. No drug resistance strain was detected in group B patients. A strong correlation was found between HIV viral load and levels of PPD-specific IFNγ response (p<0.0001; r=-0.5887).

Conclusions: MTB infection may increase level of immune activation leading to the up-regulation of latent HIV. Our findings suggest that both TB and HIV act synergistically in slowing down immune recovery in HIV infected patients after HAART.

Presenting author email: yong.yeankong@gmail.com

WE PD A206
Shining Light on Vitamin D Deficiency
C. Chiep1, C. Cariotti1, L. Bhatti1, P. Jaisingh1, P. Denouden1, M. Valdes-Suerias1, S. Sayana1, H. Khanlou1
1AIDS Healthcare Foundation, Department of Medicine, Los Angeles, United States

Background: Vitamin D supplementation has been long recommended in the promotion of healthy bone growth and remodeling. In recent years, vitamin-D deficiency has been linked to a wide variety of medical ailments, including cardiovascular disease, hypertension, chronic headaches, various cancers, and mood disorders. A link between vitamin-D deficiency and risk of infection was established more than a century ago with observations of higher rates of respiratory infections in children with nutritional rickets. In HIV-infected patients, this deficiency may have additional complications on disease progression.

Methods: We evaluated the prevalence of vitamin-D deficiency in a cohort of HIV-infected patients in our Los Angeles clinic. Patients who had at least one 25-(OH)-vitamin-D measurement within the past 6-month period (06/01/09 - 12/31/09) were included in this analysis. A normal serum vitamin-D level was defined as >30ng/ml. Vitamin-D insufficiency was defined as a concentration of 20-30 ng/ml, whereas vitamin-D deficiency was defined as <20ng/ml.

Results: 465 patients were identified based on our search criteria. Mean age was 45 years old (range 19-73); 388 males (83%), 72 females (15%), 5 transsexual (2%), 51 Caucasian (13%), 129 African-American (30%), 12 Asian-Pacific-Islander (3%), 2 Native-American (<1%). Mean CD4 count was 520 cells/mm³ (range 8-2332); mean HIV-RNA-level was 9347 copies/ml (3.97 log10) [range < 48-875,550; 1.68-5.94 log10]. Of these patients, inadequate vitamin-D levels were identified in 306 patients (66%) of whom 174 (28%) met criteria for vitamin-D insufficiency and 132 (28%) met criteria for vitamin-D deficiency. 159 patients (34%) were found to have normal vitamin-D levels.

Conclusions: Two-thirds of HIV-infected patients screened were found to be insufficient or deficient in vitamin-D stores. Given the known association between vitamin-D and other infectious processes, it seems reasonable to add vitamin-D measurement and supplementation to the routine management of HIV-infected patients. The impact of vitamin-D deficiency warrants further research.

Presenting author email: owatayoin_adeyemi@rush.edu
WEPDB103
Risk factors for vitamin D deficiency in HIV-1 infected adults in the South-Central United States
B. Crutinio1, J. Gathe Jr.2
1University of Houston, Houston, United States, 2Therapeutic Concepts, Inc., Houston, United States

Background: Few studies have evaluated risk factors for vitamin D deficiency in HIV-infected patients. We investigated the prevalence and risk factors for vitamin D deficiency in HIV-infected patients.

Methods: Cross-sectional study, October 2008 to April 2009, included 200 HIV-1 infected patients from a private practice in Houston, Texas (latitude 29 N, 43 minutes). Use of vitamin D supplements, dietary vitamin D intake, and average sunlight exposure (minutes/day) were surveyed for each patient. Pertinent laboratory values, demographics, body mass index (BMI), smoking status, and current antiretrovirals were also collected. Univariate and multivariate analyses were conducted to assess risk factors for vitamin D deficiency.

Results: 200 patients aged 45 ± 9.8 (mean ± SD) were evaluated in this study. Male 76%, 49% African American, 4% Caucasian, and 9% Hispanic. Median (range): BMI 26.2 (23.3, 29.7), CD4 388 [217, 610] cells/mm³, CD4% 22.4 (17.4, 30.4). 82% had viral load < 400 copies/mL. Among 87% of patients on antiretrovirals, 67% were receiving protease inhibitors and 20% non-nucleoside reverse transcriptase inhibitors. Median serum 25(OH)D was 15.5 (10.0, 24.6). Vitamin D levels were commonly suboptimal (< 30 ng/mL; 86%), deficient (< 20 ng/mL; 64%), or severely deficient (< 10 ng/mL; 26.5%). Univariate analysis revealed that African American, increased BMI, current smoker, minimal vitamin D supplement use, and low total vitamin D intake (supplement and dietary) were associated with vitamin D deficiency or worse (p < 0.05, each). In multivariate analysis, African American race (Adjusted Odds Ratio (AOR): 3.53; 95% CI: 1.83-6.82; p = 0.0002), BMI (AOR: 1.069 95% CI: 1.002-1.139; p = 0.043), and no vitamin D supplemen- tation (AOR: 0.997 95% CI: 0.996-0.999; p = 0.0002) were significant independent predictors of vitamin D deficiency or worse.

Conclusions: Vitamin D deficiency or severe deficiency was highly prevalent in this diverse HIV population. In the population, African Americans or patients with high BMI may benefit from vitamin D supplementation.

Presenting author email: bcruitinio@chpnet.org

WEPDB105
No association of vitamin D levels with individual antiretroviral agents, duration of HIV-infection, alkaline phosphatase levels nor bone mineral density findings
T. Rachid, E. Deuff, T. Meyron, S. Mandalia, L. Waters, M. Bower, R. Jones, M. Nelson
Chelsea and Westminster Hospital, HIV Medicine, London, United Kingdom

Background: Bone health has emerged as an area of concern in individuals living with HIV. The aim of this study was to investigate the prevalence of and identify risk factors for vitamin D deficiency in a large HIV cohort.

Methods: Consecutive patients attending the HIV clinic in July 2009 had serum 25(OH) vitamin D levels. Data were collected retrospectively reflecting gender, ethnicity, age, current treatment regimen, HIV viral load, CD4 count and duration of infection.

Vitamin D levels were defined as normal when >70nmol/L, low 40-70nmol/L, deficient <40nmol/L. SAS statistical package version 9.1 was used for linear regression analysis.

Results: 312 consecutive patients with mean age 48 years (25-83) were identified. 88% were male. Mean duration of HIV infection was 12 years (0-26).

Median vitamin D level was 66nmol/L (range <10-221). 109 (35%) were de- ficient as low and 64(21%) were severe. Vitamin D levels below the normal range were correlated with non-caucasian ethnicity (p < 0.001) and female sex (p < 0.001). There was no association with any antiretroviral class or specific agent, including efavirenz. Individuals with low vitamin D levels were not more likely to have a raised alkaline phosphatase level. In total, 102 patients (33%) had undergone bone mineral density measurement within the last six months for unrelated reasons. Median vitamin D levels were 71.71 and 58nmol/L for those with normal, osteopenic and osteoporotic results respectively.

Conclusions: In this study, we could not find any association of low vitamin D with any drug class or individual agent, which is in contrast to the findings of several other studies. The only associations identified were with classical risk factors of sex and race. The lack of association of low vitamin D levels with alkaline phosphatase level and bone mineral density findings brings into ques- tion the utility of this test as part of routine HIV care.

Presenting author email: emma.devitt@chelwest.nhs.uk

WEPDB104
Evaluation of vitamin D levels in HIV-infected patients at the Center of Comprehensive Care, St Luke’s Roosevelt Hospital Center, New York, USA
V. Gandhi1, J.H. Kim2, G. Psevdos Jr.1, F. Espinoza3, J. Park4, V. Sharp4
1Center for Comprehensive Care, St Luke’s Roosevelt Hospital, Infectious Diseases, New York, United States, 2University of Pittsburgh Medical Center, Infectious Diseases, Pittsburgh, United States, 3St Luke’s Roosevelt Hospital, Medicine, New York, United States, 4Center for Comprehensive Care, St Luke’s Roosevelt Hospital, New York, United States

Background: Vitamin D (VitD) regulates bone metabolism but has also immunoregulatory properties. Osteopenia and osteoporosis are increasingly ob- served in HIV-infected patients. Few studies have examined the VitD status in HIV-infected patients.

Methods: A retrospective chart review of 2992 HIV-infected patients was conducted from 9/1/08 to 5/31/09. 342 patients had 25-hydroxyvitamin D obtained by radioimmunoassay (ARUP® Laboratories, Salt Lake City, UT, USA). None were receiving VD supplements. Level < 20ng/mL denotes deficiency, 21-29 insufficiency, 30-80 optimum levels. We analyzed demographic/labora- tory data for risk factors for VitD deficiency.

Results: VitD deficiency was noted in 205/342 (59.9%); Insufficiency in 82/342 (24.1%) and Deficiency in 34/342 (10%). Median serum 25(OH)D was 22.2 (14.7, 30.4). 82% had viral load < 400 copies/mL. Among 87% patients on antiretrovirals, 67% were receiving protease inhibitors and 20% non-nucleoside reverse transcriptase inhibitors. Mean serum 25(OH)D was 15.5 (10.0, 24.6). Vitamin D levels were commonly suboptimal (< 30 ng/mL; 86%), deficient (< 20 ng/mL; 64%), or severely deficient (< 10 ng/mL; 26.5%). Univariate analysis revealed that African American, increased BMI, current smoker, minimal vitamin D supplement use, and low total vitamin D intake (supplement and dietary) were associated with vitamin D deficiency or worse (p < 0.05, each). In multivariate analysis, African American race (Adjusted Odds Ratio (AOR): 3.53; 95% CI: 1.83-6.82; p = 0.0002), BMI (AOR: 1.069 95% CI: 1.002-1.139; p = 0.043), and no vitamin D supplemen- tation (AOR: 0.997 95% CI: 0.996-0.999; p = 0.0002) were significant independent predictors of vitamin D deficiency or worse.

Conclusions: Vitamin D deficiency or severe deficiency was highly prevalent in this diverse HIV population. In the population, African Americans or patients with high BMI may benefit from vitamin D supplementation.

Presenting author email: vgandhi@chpnet.org

WEPDB106
Prevalence of hypovitaminosis D and factors associated in a sample of HIV patients
D. Rocaperra1, E. Ricci1, L. Carenzi1, M. Schiavini1, P. Meraviglia1, D. Minisci1, M. Campanelli2, C. Gervasio1, M. Bevilacqua1, G. Rizzardi1, P. Bonfanti1, I. Sacco Hospital, Infectious Diseases, Milan, Italy, 1I. Sacco Hospital, Endocrinologic Unit, Milan, Italy

Background: bone metabolism alteration is an important issue in HIV pa- tients even if pathogenesis of mineral density loss is not yet disclosed. Vit-amin D has a central role in the regulation of bone mineralization favoring the bowel absorption of calcium and phosphorus and decreasing the calcium kidney excretion. A deficit of 25-OH vitamin D stimulates the release of para-thormone (PTH) which activates osteoclastic bone resorption in order to rebal- ance calcium serum levels.

Objectives: the aim of this study is to evaluate the prevalence of hypovita-minosis D and to investigate its relationship with serum PTH levels in a sample of HIV-positive patients on HAART.

Methods: we performed a cross-sectional analysis considering immuno-virological parameters, serum levels of 25-OH vitamin D, PTH and phospho- rus, and HAART treatment in our outpatient clinic for the management of HAART-related toxicity. Univariate and multivariate linear regression analyses were conducted to identify the significance of the relationships among the variables.

Results: 281 patients were included. The mean age was 47 (range 32-72). Males were 57.6%. Hypovitaminosis (< 30 ng/dL) was detected in 225 (80.1%) patients; among these, 95 (33.8%) had severe hypovitaminosis (< 15 ng/mL). Among 164 patients (58.4%) on TDF-based treatments, hypovita-minosis was detected in 127 (77.4%). Univariate analyses showed that serum PTH was significantly associated with gender, 25-OH vitamin D and TDF use. In a multiple linear regression analysis, these variables were confirmed as independently related to serum PTH levels.

Conclusions: the main result of this study is the remarkably high prevalence of hypovitaminosis D in our cohort. Furthermore, investigating the inverse correlation existing between vitamin D and PTH, we found that patients on TDF-based treatment had higher levels of PTH than patients not on TDF but similar vitamin D levels.

Presenting author email: pocaterra.daria@hsacco.it
**WEpdb203**

**HCV genotypes distribution in the Krasnoyarsk region HIV-positive and HIV-negative populations**

**T. Chaychuk**, N. Gankina, O. Rumyanceva

1) HCV/HIV-co-infected patients and 2) HCV-infected patients without HIV co-infection

**Regional Center of AIDS Prevention, Medical Treatment Department, Krasnoyarsk, Russian Federation; Regional Center of AIDS Prevention, Laboratory of Viral and Bacterial Diagnostics, Krasnoyarsk, Russia.**

**Issues:**

HIV/HCV co-infections are highly prevalent in Krasnoyarsk region (approximately 50–60 percent). Due to the wide use of HAART and programs for prevention of opportunistic diseases, life expectancy of HIV-infected individuals has increased. Chronic viral hepatitis has become one of the main causes of death. HIV/ HCV coinfected patients and HIV-negative patients with HCV infection require HCV genotype testing.

**Description:**

The HCV genotypes distribution in HIV-infected residents and in the patients without HIV co-infection of the Krasnoyarsk region were studied. We have investigated 623 HIV-positive patients and 1374 blood samples taken from 1374 HIV-negative patients by polymerase chain reaction (PCR) in the courses of HAART and the Bio-Rad Cycler Sample Loading Tray.

**Results:**

HCV genotype 3 predominated in HIV-positive cohort samples (57.1%) and the rest were type 1 (39.5%) and type 2 with low distribution (3.4%). HCV genotype 3 was documented in HIV-negative cohort samples (36.2%). HCV genotype 1 predominated in this cohort’s samples (57.7%), with type 2 being with low distribution (6%).

**Conclusions:**

The HCV genotypes distribution in HIV-infected residents is comparable to those with elevated ALT levels.

---

**WEpdb204**

**HBV related complications in HIV-positive patients during HAART therapy**

**M. Dumitu**, E. Dumitu, S. Rugina, R.C. Cernatu, S. Diaconu

**Institute University Constanta Faculty of Medicine**, Romania

**Clinical Infectious Diseases Hospital, Constanta, Romania.**

**Background:**

Chronic hepatitis B virus (HBV) infection is overall recognised in 10% of HIV-positive persons worldwide, with large differences according to geographical region. Since the widespread use of HAART and programs for prevention of opportunistic diseases, life expectancy of HIV-infected individuals has increased. Chronic viral hepatitis has become one of the main causes of death. HIV/HCV co-infected patients and HIV-negative patients with HCV infection require HCV genotype testing.

**Methods:**

We followed-up 72 HIV/HBV coinfected patients treated with HAART containing, during a period of five years. Clinical and biological data were collected every 3 months, immunological and virological data every six months, ultrasound every year. Due to availability, in the last year we performed transient elastography (Fibroscan) in every patient. Determination of HBV drug resistance was performed in cases with detectable serum HBV-DNA level.

**Results:**

No patients had signs of liver cirrhosis in the beginning of the study period. After five years of follow-up, advanced liver disease was diagnosed in 8/72 patients during follow-up: 5 cirrhosis, 2 hepatocellular carcinoma (HCC), and 1 fulminant hepatitis. All these patients had high level of serum HBV-DNA, lamivudine resistance and undetectable serum level of HBV. Five of these patients died. The rest 64 patients had no signs of acute or chronic liver disease, lower than 2 x ULN level of ALT, and F0-F3 according to Fibroscan.

Lamivudine resistance in these patients was found in 10 cases.

**Conclusions:**

In HIV/HBV coinfected patients treated with HAART, lamivudine resistance is less frequent (25%) than in immunocompetent patients (higher than 60%), but when occurred, was associated with a high rate of progression to cirrhosis, liver insufficiency and HCC. Appropriate monitoring of chronic viral hepatitis B in HIV-positive patients include the recognition of lamivudine resistance in all cases with detectable HBV-DNA level.

**Presenting author email:** dumitu@hmail.com

---

**WEpdb205**

**Hepatitis B Virus (HBV) prevalence in the outpatient adult HIV population at the Botswana-Baylor Children’s Clinical Centre of Excellence (BCCCOE) in Gabarone, Botswana**

**S. Davis**, 1F. Patel, 2M. Tolke, 1V. Mabikwa, 1,2G. Arabani

1Botswana-Baylor Children’s Clinical Centre of Excellence, Gabarone, Botswana. 2Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children’s Hospital, Houston, United States.

**Background:**

The prevalence of HBV co-infection in HIV-infected patients in sub-Saharan Africa is not clearly defined, including in Botswana. Prevalence results vary widely by study setting. For example, a study conducted in Botswana among adult HIV outpatients at a national tertiary healthcare facility found a 10.6%-HBsAg prevalence, while a South African study showed 4.8% prevalence in an urban population. Despite substantial prevalence, routine HBV screening is not included in Botswana’s national HIV treatment protocol.
WEPDB206 Late and low coverage with hepatitis B serology screening among HIV-infected patients in a resource-limited setting: an issue to improve for long-term HIV care

S. Kiertiburanakul, D. Chotiprasitsakul, K. Atamasirikul, S. Sunkanuparp
Faculty of Medicine Ramathibodi Hospital, Mahidol University, Department of Medicine, Bangkok, Thailand

Background: Prevalence of hepatitis B virus (HBV) infection is relatively high in Asia and Africa. Although HBV serology screening has been recommended for HIV patients, it has not been routinely performed, particularly in resource-limited settings.

Method: An observational study was conducted in a tertiary care hospital in Thailand to determine the proportion and the timing of the HBV-infected patients whom HBV serology was screened.

Results: There were 416 HBV-infected individuals enrolled. Of these, 61.3% were males, median (IQR) age was 41 (36-48) years, median (IQR) nadir CD4 cell count was 74 (33-206) cells/mm3 and 92% had hetero-sexual risk factor. HBsAg and anti-HBs were screened in 288 (69.2%) and 170 (40.9%) patients, respectively. Prevalence of positive HBsAg was 9.0% and that of positive anti-HBs was 5.0%.

Conclusion: HBV serology was screened before antiretroviral treatment initiation in only 136 (35.4%) and 59 (15.4%) patients, respectively. HBsAg was screened before lamivudine initiation in 55.1%, whereas, it was screened before tenofovir (TDF) initiation in 79.2%. TDF initiation had odds ratio of 2.69 (95% confidence interval 1.36-5.69) of HBsAg screening compared to ones without TDF initiation.

WEPDC102 Men who have sex with men (MSM) and risk factors associated with last sexual intercourse with a man and a woman in Senegal - ELLiHoS Project, ANRS 12139

1IRD, LEPED URI 256 (Paris Desartes IMED IRD), Paris, France, 2Institut d'Hygiène Sociale, Division SIDA/TIST, Dakar, Senegal, 3IRD, IRD, US09, Dakar, Senegal

Background: Men who have sex with other men (MSM) are in Africa a vulnerable population which has hitherto been improperly handled with a wide range of health services. A better understanding of these services in government facilities for MSM with in-town MSM currently accessing private healthcare, building capacity among private providers to deliver appropriate and tailored HIV and STI prevention services for MSM is critical.

Presenting author email: mshehy@popcouncil.org

WEPDC103 Reducing syphilis among HIV-infected and -uninfected gay men in Australia

D. Wilson, G. Prestage
1University of New South Wales, National Centre in HIV Epidemiology and Clinical Research, Sydney, Australia, 2La Trobe University, Australian Research Centre in Sex Health and Society, Melbourne, Australia

Background: Resurgent syphilis epidemics around the world have disproportionately affected HIV-positive gay men. HIV incidence has coincidently been increasing among gay men. The Australian HIV ‘partnership model’ brings together government, community, clinicians and researchers to work together for the best public health response. This same model was used to establish Australia’s National Syphilis Action Plan (NSAP), which commissioned us to investigate the feasibility of multiple interventions among gay men.

Methods: We combined mathematical modeling with social research to explore the feasibility of different interventions (partner reduction, increased condom use, increased testing frequency, mass treatment, improved partner notification, and chemoprophylaxis) to reduce rates of syphilis. We conducted online surveys and focus groups among HIV-negative and HIV-positive gay men to assess the acceptability of such interventions and we developed a mathematical transmission model of HIV and syphilis epidemics that simulated a population of sexually active gay men to explore the potential epidemiological impact of each intervention.

Results: The modeling demonstrated that changes in sexual behavior (reducing sexual partners or increasing condom usage) are only likely to be effective if maintained indefinitely, and the social research indicated such changes were not generally acceptable as a long-term strategy. Increasing rates of testing and partner notification would have a large epidemiological impact and be generally acceptable to most gay men with a high level of confidence in their HIV clinical management for HIV-positive men and with HIV testing for men previously untested with HIV is likely to be effective and acceptable.

Conclusions: Our multi-disciplinary approach demonstrated which interventions may be both effective and acceptable in reducing syphilis among HIV-infected and -uninfected gay men and how they may be delivered. Further work will focus on any effects of syphilis epidemics on HIV transmission within this population. Based on this research, Australia’s NSAP partnership set target goals for reducing syphilis among gay men.

Presenting author email: dwilson@nchecr.unsw.edu.au
WEPCDC104

Continuing increase in hepatitis C virus infections among HIV-infected men who have sex with men (MSM)?

A.T. Urbanus1, T.W. van de Laar1, I.G. Stolte1, J. Schinkel2, T. Heijman1, N.E. Conti3, A. Snyders4
1Public Health Service, Cluster of Infectious Diseases, Amsterdam, Netherlands; 2Academic Medical Center, Department of Clinical Virology, Amsterdam, Netherlands; 3National Institute for Public Health and the Environment, Center for Infectious Disease Control, Bilthoven, Netherlands; 4Academic Medical Center, Department of Internal Medicine, Division of Infectious Diseases, Tropical Medicine and AIDS (CINIMA), Amsterdam, Netherlands

Background: Although HCV is rarely transmitted sexually, HCV has recently emerged as an STI among HIV-positive MSM. Here we provide an update on the HCV prevalence among MSM visiting a large STI clinic in the Netherlands, which includes the rate of acute infections, and determinants of acquiring HCV.

Methods: During five waves of the bi-annual anonymous survey (2007-mid 2009), 5177 attendees of the STI clinic Amsterdam, of which 1282 (24.8%) were MSM, were interviewed about risk factors for blood-borne and sexually transmitted infections and screened for HIV and HCV antibodies. Additional HCV RNA tests were performed in all HIV-positives regardless of their anti-HCV status. Determinants of HCV infections were analysed using logistic regression. Phylogenetic analysis was used to determine evidence for sexual transmission.

Results: The anti-HCV prevalence among HIV-positive MSM was 13.3% (12/90) in 2007, 14.7% (21/142) in 2008 and 14.7% (11/75) in 2009. The rate of acute infections (anti-HCV negative and HCV RNA positive) among anti-HCV negative HIV-positive MSM increased from 2.3% in the first wave to 8.6% in the third wave. No acute cases were observed in the most recent two waves. As previously reported HIV-infection, fisting, IDU and GHB-use were independently associated with HCV and phylogenetic analysis revealed a high degree of MSM-specific clustering. HCV prevalence among HIV-negative MSM increased from 0.5% (1/195) in the first wave to 1.7% (4/234) in the last wave. 3/5 of these HCV-negatives reported IDU.

Conclusions: The HCV prevalence among HIV-positive MSM is still high but remained stable over-time. Considering the decline in acute infections, the epidemic appears to be levelling off. Risk factor analysis and the MSM-specific clustering support ongoing sexual transmission of HCV among HIV-positi- ve MSM. Increased awareness and providing clinicians and MSM information used to test associations between the patterns and variables of interest.

Results: Four distinct patterns of drug use emerged: the “low use group” (79.3%); the “decreasing use group” (7.2%) included some frequent drug use at age 44 that declined with age; the “middle peak group” (7.0%) increased use from age 44, peaked at age 52 and then declined to low use at age 63; and the “heavy use group” (6.5%) whose frequent drug use remained high throughout depression led to targeted national high risk sexual behavior (number of unprotected anal sex partners) were significantly associated with the groups. Details of these findings will be presented.

Conclusion: While majority of MSM reported low frequent drug use, three subgroups of men had distinct patterns of use over 10 years of their midlife. These results will contribute to the development of interventions to prevent and treat substance abuse and related health and social problems among both older HIV-positive and negative MSM.

Presenting author email: aurbanus@ggd.amsterdam.nl

WEPCDC105

Health promotion and STD/HIV/AIDS prevention strategies among Brazilian transvestites: the Ministry of Health invited transvestites belonging to social networks to suggest possible ways of preventing STD/HIV/AIDS in that segment of the population

J. Kraizyck
Ministry of Health, Prevention, Brasilia, Brazil

Issues: In addition to their carefully groomed bodies and dazzling handbags they have brought with them long, accumulated experience as protagonists of active expressions of identity, stigma and violence.

Description: In workshops that made use of creativity, street art, graffiti and other means, transvestites delineated a new identity among transvestites. Revealing the dynamics of their networks, their territoriality and identity was just one of the products achieved through the use of those media. Debates, gestures, expressions and political postures helped to gain an approximation of the segment’s needs for certain prevention programs in the health service and health promotion strategies. Based on the products of the workshops and debates, campaign, educational and prevention materials were developed and the dialogue between administrators, professionals and the segment itself was reinforced. The process made it clear how important it is to understand the social locus occupied by transvestites and the extent to which that locus challenges the logic of the binary schemes “masculine and feminine” and “heterosexual and homosexual”. The narratives reveal how living the transvestite life means being careful of the risk of being on the edge, which, as one transvestite put it, ultimately means “experiencing the pain and the joy of living the transvestite life means taking the risk of being on the edge, which, as one transvestite put it, ultimately means “experiencing the pain and the delight of knowing who we really are”.

Lessons learned: The process that relates transvestites to the category of marginalized individuals needs to be de-constructed. The way they interact with and circulate in society poses serious threats to their health and gives rise to increasing the proportion of those who have ever tested for HIV (from 58.5% overall in 1997 (CI 57.0 - 60.0) to 72.8% in 2008 (CI 71.1 - 74.1). There is a wide geographical variation in HIV testing and significant differences by age group, ethnicity and variation in HIV testing and significant differences by age group, ethnicity and gender.

Methods: The Gay Men’s Sex Survey (GMSS) is part of the CHAPS national programme of HIV prevention for MSM, funded by the Department of Health. More than 10,000 MSM have taken part every year from 1998 to 2008, either online or via booklet versions distributed by more than 100 health promotion collaborators.

Results: GMSS has demonstrated a year-on-year increase in the proportion of MSM who have ever tested for HIV (from 58.5% overall in 1997 (CI 57.0 - 60.0) to 72.8% in 2008 (CI 71.1 - 74.1). There is a wide geographical variation in HIV testing and significant differences by age group, ethnicity and gender.

Background: The Gay Men’s Sex Survey (GMSS) is part of the CHAPS national programme of HIV prevention for MSM, funded by the Department of Health. More than 10,000 MSM have taken part every year from 1998 to 2008, either online or via booklet versions distributed by more than 100 health promotion collaborators.

Conclusions: Efforts to encourage MSM to test for HIV have been successful in increasing the proportion who have ever tested. This serial cross-sectional study, together with evidence on the reasons for not testing, were fed into the2008 programme planning for CHAPS, leading to targeted national campaigns promoting testing.

Presenting author email: peter.weatherburn@sigmaresearch.org.uk
WEPDC202
Opt-out HIV testing leads to nearly universal testing uptake among male circumcision clients in Tanzania
K. Freedberg1,6,9, I. Bassett1,4
1Massachusetts General Hospital, General Medicine, Boston, United States, 2Population Council, HIV/AIDS Research, Boston, United States, 3McCard Hospital, Durban, South Africa, 4Massachusetts General Hospital, Infectious Disease, Boston, United States, 5Brigham & Women’s Hospital, Infectious Disease, Boston, United States, 6Urban Health Institute, Johannesburg, South Africa, 7Brigham & Women’s Hospital, Orthopedic Surgery, Boston, United States, 8Brigham & Women’s Hospital, Internal Medicine, Boston, United States

Background: In high prevalence and incidence settings such as sub-Saharan Africa, repeated and repeated HIV testing is required for timely HIV diagnosis. Little is known about the impact of receiving a negative HIV test result on subsequent testing practices.

Methods: We analyzed data from the ongoing South Africa Test Identify and Link (STIAL) cohort study which enrolls subjects undergoing HIV testing in two hospitals in Durban, South Africa. Age, sex, having a partner, having family or friends with HIV, HIV knowledge, testing history and reason for baseline testing were collected at enrollment. Participants were followed for 12 months to ascertain subsequent testing practices.

Results: Of 1,235 STIAL participants tested HIV-negative at baseline, Median age was 27; 56% were female. 434 (35%) were repeat testers. Results of multivariate logistic regression showed that being female (OR=1.69, 95% CI: 1.31-2.18), < 35 years of age (OR=1.36, 95% CI: 1.06-1.74), not having a partner at baseline, not having sex with HIV-infected family or friends (OR=2.18, 95% CI: 1.53-3.12), knowing that HIV is treatable (OR=1.76, 95% CI: 1.33-2.34), and self-referral for testing (OR=1.87, 95% CI: 1.28-2.64) were independently associated with repeat testing. Rates of repeat testing among those HIV-negative at baseline. We also determined sex-specific rates of seroconversion after baseline testing.

Conclusions: Repeat HIV testing after a negative result is relatively common in Durban, especially for women and those under 35. Educational interventions focused on HIV treatment and benefits of regular screening may help reduce time between HIV infection and diagnosis.

Presenting author email: sfreedb1@partners.org

WEPDC204
HIV rapid testing in TB and drug addiction treatment facilities in Dnipropetrovsk region of Ukraine
M. Grishayeva1, D. Makisimenko1, M. Galeskaetsya1, S. Osipova1
1Central Health Access Initiative (CHAI), Kyiv, Ukraine, 2Leningradovsky Institute of Epidemiology and Infectious Diseases AM, Kyiv, Ukraine, 3NPG Public Health, Kryviy Rih, Ukraine

Issues: Approximately 350 000 individuals estimated to be living with HIV in Ukraine, 6% of all RLH registered and 1.1% out of those tested for HIV in Ukraine in 2009. The project was aimed at increasing access to HIV testing and counseling and further services for vulnerable populations through RDT implementation in TB and Drug Addiction facilities.

Description: HIV RT was launched in three drug addiction and two TB clinics in Dnipropetrovsk and Kryivi Rih cities. Doctors and nurses were trained in pre- and post-testing counseling and HIV RDT use. Partnership was set up between harm reduction programs and clinical settings to refer clients for the services. HIV RT was offered to the clients identified having HIV risky behaviour history. After obtaining an informed consent, patients’ capillary blood was tested with algorithm of rapid RTs by different manufacturers. The project was implemented with Olena Franchuk ANT AIDS Foundation financial support.

Lessons learned: 1078 patients were recruited, 32% female, 333 (30%) were newly identified HIV+; male - 78%; IDUs - 53%. HIV+ cases composed 49.4% (527/1078) recruited at enrollment. Participants were followed for 12 months to ascertain sexual activity and repeat testing rates and results. We classified participants who were HIV-negative at baseline as repeat testers if they self-reported testing prior to or after baseline testing. We used multivariate logistic regression to determine factors associated with repeat testing among those HIV-negative at baseline.

Results: HIV + RT helped to essentially reduce testing results turnaround time, which was in particularly important for IDUs clients; helped to provide comprehensive HIV post testing counseling and to consider adequate management plan.

Next steps: HIV RT should be scaled up in all regions of Ukraine and in rural areas in particularly to help to increase number of people aware of their HIV+ status and reach out to the vulnerable populations with requisite services.

Presenting author email: ignrishaye@clinfectionfoundation.org

WEPDC205
Effect of receiving a rapid negative HIV test result on subsequent HIV testing in Durban, South Africa
S. Regan1, E. Losina1,2, S. Chetty3, J. Giddy3, R. Walensky1,4,5,6, J. Katz7,8
1Massachusetts General Hospital, General Medicine, Boston, United States, 2Harvard Center for AIDS Research, Boston, United States, 3Brigham & Women’s Hospital, Infectious Disease, Boston, United States, 4Harvard University, Prevention Sciences, Cambridge, United States, 5Brigham & Women’s Hospital, Orthopedic Surgery, Boston, United States, 6Brigham & Women’s Hospital, Internal Medicine, Boston, United States, 7Brigham & Women’s Hospital, Biostatistics, Boston, United States, 8Brigham & Women’s Hospital, AIDS Epidemiology, Boston, United States

Methods: We analyzed data from the ongoing South Africa Test Identify and Link (STIAL) cohort study which enrolls individuals undergoing HIV testing in two hospitals in Durban, South Africa. Age, sex, having a partner, having family or friends with HIV, HIV knowledge, testing history and reason for baseline testing were collected at enrollment. Participants were followed for 12 months to ascertain subsequent testing practices.

Results: Of 1,235 STIAL participants tested HIV-negative at baseline, Median age was 27; 56% were female. 434 (35%) were repeat testers. Results of multivariate logistic regression showed that being female (OR=1.69, 95% CI: 1.31-2.18), < 35 years of age (OR=1.36, 95% CI: 1.06-1.74), not having a partner at baseline, not having sex with HIV-infected family or friends (OR=2.18, 95% CI: 1.53-3.12), knowing that HIV is treatable (OR=1.76, 95% CI: 1.33-2.34), and self-referral for testing (OR=1.87, 95% CI: 1.28-2.64) were independently associated with repeat testing. Rates of repeat testing among those HIV-negative at baseline. We also determined sex-specific rates of seroconversion after baseline testing.

Conclusions: Repeat HIV testing after a negative result is relatively common in Durban, especially for women and those under 35. Educational interventions focused on HIV treatment and benefits of regular screening may help reduce time between HIV infection and diagnosis.

Presenting author email: sregan@partners.org

WEPDC206
Mobile HIV/AIDS counselling and testing to reach remotely stationed Ugandan police in their workplaces
E. Otolok-Tanga1, T. Barungi2
1WorldVision Uganda, Kampala, Uganda, 2UPF, Kampala, Uganda

Issues: The Supporting Public sector workplaces to Expand Action and Responses against HIV/AIDS project (SPEAR) implements workplace-based HIV/AIDS prevention and care interventions for public sector workers in Uganda including over 29,000 officers of the Uganda Police Force (UPF). Because of their high mobility, higher-than-national-average HIV prevalence and known high-risk behaviours such as multiple and concurrent sexual partners, there was need to address this group with services such as HIV counselling and testing (HCT). However the remotely stationed police officers of the Anti Stock Theft Unit (ASTU) which guards against cattle rustling on Uganda/Sudan border had limited access to HCT services. SPEAR used a strategy of mobile units to reach these remote groups with HCT services.

Presenting author email: etolotak@worldvision.org

WEPDC210
Feasibility and acceptability of HIV self-testing among healthcare workers: results of a pilot program in two hospitals in Kenya
S. Kaliba1, W. Tun2, W.M. Murahun3

Background: Healthcare workers (HCWs) are highly vulnerable to occupa- tional exposure to HIV. Yet many often do not get tested for HIV due to con- cerns about confidentiality and stigma. Interventions are needed to reduce barriers for HCWs to be tested for HIV. We evaluated the acceptability and fea- sibility of a free home-based HIV self-testing (HST) intervention for HCWs.

Methods: A 1-month pilot was implemented in 2 hospitals in Kenya. HCWs participated in pre-HST information session, and HST kits (oral tests) were provided free-of-charge for themselves and their partners. Pre- and post-test counseling was available through a telephone counseling service for HCWs.

Focus group discussions (N=5) with 50 HST kit recipients and interviews (N=5) with program coordinators and hospital administrators were conducted to understand experiences with and perceptions of HST.

Results: Of 295 HCWs, 70% (n=207) attended the pre-HST information ses- sion and 93% (192/205) attended the HST kit. An additional 38 HCWs took kits from on-site coordinators yielding an overall acceptance rate of 78% (230/295). PFG results revealed that almost all HCWs who took an HST kit actually tested, and the majority tested themselves by removing the reseal- ing the kit. They found the kit convenient as it can easily be hidden inside a pocket. The majority of HCWs reported preference for HST over HCT. However, there was need to address this group with services such as HIV counselling and test- ing (HCT). However the remotely stationed police officers of the Anti Stock Theft Unit (ASTU) which guards against cattle rustling on Uganda/Sudan border had limited access to HCT services. SPEAR used a strategy of mobile units to reach these remote groups with HCT services.

Presenting author email: etolotak@worldvision.org
WEPP103 Predictors of heterosexual anal sex for at-risk adolescents in the United States

M. Lightfoot1, C. Branson2

1University of California at San Francisco, Medicine, San Francisco, United States, 2University of California, Los Angeles, Psychiatry, Los Angeles, United States

Background: HIV prevention efforts with heterosexual adolescents have primarily focused on increasing condom use, reducing sexual partners, and reducing unprotected vaginal sex. Although anal intercourse represents the highest risk for HIV infection and is likely to be used by protecting, it is rarely studied. Secondary objectives include the evaluation of determinants and predictors of heterosexual anal sex among at-risk adolescents in Los Angeles, California.

Methods: A total of 698 adolescents aged 14 - 18 years (M = 16.1 years) were recruited from alternative education settings in the community and long juvenile detention centers. Utilizing an audio computer assisted self-interview, adolescents self-reported demographic information and sexual behavior over the previous 90 days, including total number and gender of sexual partners, type of sexual partner, number of vaginal and anal sex acts, and condom use.

Results: 536 (77%) adolescents indicated they engaged in intercourse with a partner of the opposite sex in the previous 90 days. Of the 190 who reported oral and anal intercourse and most were male (90%). Most (52%) acts of anal intercourse were not condom-protected. More young adolescents reported sexual intercourse, 39% of 14-15 year olds compared to 26% of 16-17 year olds and 19% of 18-19 year olds. Males were more than twice as likely to report sexual intercourse as females (33% vs. 15%; p< .01). Substance use with sex was predictive of any anal intercourse and unprotected anal intercourse (p< .01). As was an age of sexual initiation of 11 years or younger (p< .01). Part time was significantly predictive of having had anal intercourse, with the highest frequency reported in regular (32%) partnerships compared to casual (27%) or one time partnerships (26%; p< .05).

Conclusions: Anal intercourse among at-risk adolescents is not uncommon and prevention programs must incorporate discussions and protective strategies for this behavior.

Presenting author email: mal@ucsf.edu

WEPP104 Sexual activity and risk behaviors among HIV-infected patients initiating antiretroviral therapy in rural district hospitals in Cameroon: preliminary results of a 24-month follow-up

F. Marcellin1,2,3, K. Kouraack3, J. Cohen3,2, S. Boyer4,2,1, P. Moatti3,2, M.P. Carrieri1,2,3, E. Delaporte4, C. Laurent3, B. Spire3,4

1INSERM, U912 (SE4S), Marseille, France, 2Université Aix Marseille, IRD, UMR-S912, Marseille, France, 3ORS PACA, Observatoire Régional de la Santé Provence Alpes Côte d’Azur, Marseille, France, 4Central Hospital, Yaoundé, Cameroon, 5Institut de Recherche pour le Développement (IRD), Université de Montpellier 1, UMR1445, Montpellier, France

Background: To date, little is known about the impact of antiretroviral therapy (ART) on sexual activity in resource-limited settings. Longitudinal data were used to study the course of sexual activity and risk behaviors of HIV-infected patients initiating ART in Cameroon and the impact of ART on patients’ sexual behaviors.

Methods: STRALLS (ANRS 12-110) is an ongoing, randomized, 24-month, open-label trial that enrolled 459 HIV-infected ART-naive adults followed-up in 9 rural district hospitals in Cameroon designed to explore the impact of ART on patients’ sexual activity. Longitudinal data were used to study the course of sexual activity and risk behaviors of HIV-infected patients initiating ART in Cameroon and the impact of ART on patients’ sexual behaviors.

Results: STRALLS (ANRS 12-110) is an ongoing, randomized, 24-month, open-label trial that enrolled 459 HIV-infected ART-naive adults followed-up in 9 rural district hospitals in Cameroon designed to explore the impact of ART on patients’ sexual activity. Longitudinal data were used to study the course of sexual activity and risk behaviors of HIV-infected patients initiating ART in Cameroon and the impact of ART on patients’ sexual behaviors.
WEPPDD105
The influence of dyadic relationships on protective anal sex among male to female transsexual (Waria) in Yogyakarta, Indonesia
I. Praptoraharjo, J.A. Levy
School of Public Health, University of Illinois at Chicago, Health Policy Administration, Chicago, United States

Background: About 30% of Indonesian male to female transsexual (Waria) are estimated to be HIV-positive. Little is known, however, about the sexual practices that places this population at high risk for the virus. This study examines the influence of sexual partnership on condom use among waria and their sexual partners.

Methods: A modified chain-referral sampling method was used to recruit 165 Waria living in Yogyakarta, Indonesia. Of the 165, 73% reported engaging in commercial sex. A Generalized Estimating Equation was used to estimate the consistency of condom use in the past 30 days.

Results: Receptive sex workers averaged 2 anal sex partners in the last 30 days and sex workers averaged 19. About 59% of sexual dyads reported using condoms in the last day period. Nonetheless, only 17% of waria reported consistently using condoms with different partners. Controlling for basic demographic and psychosocial variables, consistent condom use in the past 30 days predicted by higher sexual communication within a dyad (OR: 1.9, p < .05), greater power in the relationship (OR: 2.7, p < .05) and condom use at first anal sex within dyads (OR: 7.1, p < .001). Emotional ties between partners were only marginally association with consistency of condom use (OR: 4.6, p < .1).

Conclusions: The study has shown that the dynamic of sexual partnerships contributes significantly to the likelihood of protective anal sex among waria. The study underscores that risky sexual behavior is not solely a result of individual's decision, but is a product of interactions between two partners. Therefore, current intervention should address this dynamic in developing strategies to promote protective anal sex.

Presenting author email: gracep2@uic.edu

WEPPDD106
Psychosocial indicators of children of parents living with HIV in Thailand
S.J. Lee, L. Li, S. Khumtong1, P. Thammawijaya2, S. Iamsirithaworn3
1Department of Public Health, University of California, Los Angeles, Semel Institute, Center for Community Health, Los Angeles, United States, 2Thai Ministry of Public Health, Bureau of Health Promotion and Disease Control, Nonthaburi, Thailand

Background: Children of parents living with HIV in Thailand face tremendous psychological challenges. The impact of parents’ HIV on their children can range from sense of rejection, discrimination and psychosocial problems. The goal of this study was to examine ways in which children’s perception of their HIV-infected parents affect their levels of mental health. In addition, we examined how PHLS’s stressors influence their children’s mental health.

Methods: This study uses baseline data collected from a randomized intervention trial in northern and northeastern Thailand. Among the 410 PLH enrolled in the trial, 207 children of PLH (aged 12-18) were recruited and interviewed. Correlation and regression analyses were used to examine the predictors of children’s parental perception. Children’s psychosocial indicators included: Everyday Stress Index (ESI) and Rosenberg Self Esteem Scale, and Thai Emotional Quotient (TEQ). Children’s perception of PLH was assessed by the Parental Bonding Index (PBI). Parent indicators included depressive symptoms, perceived stigma, and emotional social support.

Results: We found a significant association between children’s stress (ESI) and their parental bonding perception (β = .245, p < .000). Higher levels of stress were significantly associated with higher parental bonding (β = -0.224, p < 0.001). Significant association was observed between children’s overall emotional quotient (TEQ) and parental bonding (β = .05). Regarding PLH indicators, PLH’s depressive symptoms were risk factors for children’s level of motivation (TEQ: motivation) (β = -0.1, p = 0.04). In addition, PLH’s internalized shame was a risk factor for children’s perceived level of satisfac-

Conclusions: Our findings underscore the complex relationship between children’s mental health and their perception of their HIV-infected parents. In addition, PLH’s stressors significantly impact children’s mental health. Interventions that address the challenges that PLH and their children face are urgently needed. In addition to the need for PLH, such interventions should also address and build resilience among needs of children.

Presenting author email: sjiie@mednet.ucla.edu

WEPE01
Improving Performance of PMTCT Programs
WEPE02
Addressing PMTCT gaps through a systematic process improvement (PI) approach

WEPE03
Uptake and outcomes of a prevention-of-mother-to-child transmission (PMTCT) program for 382 mother-child pairs in Zomba district, Malawi
M. van Lettow1, R. Bedell2, A.K. Chan3, L. Gaw4, S. Gatto5, I. Mayun6, F. Shibuya7, B. Bisk3
1Dignitas International, Zomba, Malawi, 2Dignitas International, Medical Advisor, Toronto, Canada, 3University of Toronto, Toronto, Canada, 4Simon Fraser University, Burnaby, Canada, 5Ministry of Health, Department of HIV and AIDS, Lilongwe, Malawi, 6Ministry of Health, District Health Office, Zomba, Malawi

Background: HIV prevalence among pregnant women in Malawi is 12.6%, and mother-to-child transmission is a major route of transmission. As basic PMTCT services have expanded recently, we sought to determine uptake of services, HIV-relevant infant feeding practices and mother-child health outcomes.

Methods: A matched-cohort study of HIV-infected mothers 18-20 months following their estimated delivery date in Zomba District, Malawi. All HIV-infected mothers from 15 rural public PMTCT facilities delivering 18-20 months prior to data collection were identified from registers. For every HIV-infected mother, the next registered HIV-uninfected mother was identified as control. Results: 720 mothers were identified; 10 (9 HIV-infected, 1 HIV-uninfected) mother-child pairs were both confirmed dead, 168 HIV-infected and 214 HIV-uninfected were found and interviewed. 15/163(9%) mothers denied their HIV status at the time of interview. 17/163(10%) of HIV-infected mothers were on ART during pregnancy and single-dose NVP (sdNVP) was taken by 117/163(72%) HIV-infected mothers at labor onset and by 114/163(70%) babies within 72 hours after birth. HIV-infected mothers breastfed longer than HIV-infected mothers (mean 18.5 vs. 13.5 months, respectively; p < 0.01); 59% of HIV-infected and 96% of HIV-uninfected mothers breastfed >18months (p=0.01). 27/163(19%) of HIV-infected mothers started ART at a mean of 9 months into the breastfeeding period. 52% of exposed children were tested at the time of study: 16/112(14%) of surviving exposed children were tested at the time of study: 16/112(14%) tested HIV+, 2/16 (13%) were on ART. HIV-free infant survival was 123/168 (73%, 95%CI 68-80).

Conclusions: PMTCT services in Zomba district achieved moderate uptake of NVP for mother and infant, but follow up of exposed infants was poor. Improved HIV-free infant survival may be achieved by optimizing integration of HAART during pregnancy and breastfeeding, and improved post-natal follow-up.

Presenting author email: m.vanlettow@dignitasinternational.org

Abstract Book Volume 2 | www.aids2010.org
1,216 women (6.2%) tested HIV-positive. During the same period, only 535 district, were reviewed to assess the proportion of women who tested HIV-district in Kenya, and individually-linked data from one hospital within the ing HIV testing within antenatal/delivery services and/or HIV services in one Methods:

Background:

With provider-initiated HIV counselling and testing in antenatal and delivery services, many pregnant women are diagnosed with HIV and offered services, using mother-to-child HIV transmission, but little at- tention has been paid to their linkage into services for their own HIV care and treatment.

Methods: Routinely-collected district-level data from all facilities offering HIV testing within antenatal/delivery services and/or HIV services in one district in Kenya, and individually-linked data from one hospital within the district, were reviewed to assess the proportion of women who tested HIV-positive within antenatal/delivery services who registered at HIV-related services.

Results: District-wide, of the 19,739 who were tested for HIV within antenatal care and delivery services, 14% (n=2,747) were not returned to collect their CD4 count results and are therefore unable to start antiretroviral therapy. Immediate triage of the patient with a same-day CD4 count may improve initiation rates. We evaluated the accuracy of CD4 results were brought back to the clinic same day via the kombis

Lessons learned: The daily kombi sample transportation led to a 13-fold increase (22 to 293) in the monthly average number of clients who had blood drawn, a reduction in sample turn-around time from 13 to 3 days and elimi- nation of one clinic visit before clients received lab results. On-site spu- rum collection for TB diagnosis became feasible. Specimen tracking was 100% with zero patient loss to follow-up. Average daily transport cost was $4.09 per site. Providers thought the new system was convenient for clients and staff, improved treatment monitoring, ensured quicker processing of clients for ART initiation. The system was found to be inexpensive, reliable and therefore a good option to consider for resource-constrained settings.

Next steps: Expand pilot to evaluate challenges associated with long term implementation on a larger scale. Share lessons learned and work on the gaps identified in long term with national stakeholders.

Presenting author email: pp2322@cmu.edu

WEPEDE02 Non-laboratory staff can achieve similar CD4 counts on a traditional laboratory instrument at a primary health care center when compared with a reference laboratory method

M. Faal1, R. Osih1, L. Coetzee1,2, M. Nkone1, D. Larvie1,3, D. Glenross1,3
1Reproductive Health and HIV Research Unit, Univ of Witwatersrand, Johannesburg, South Africa; 2University of the Witwatersrand, Molecular Medicine and Haematology, Johannesburg, South Africa; 3National Health Laboratory Services, Johannesburg, South Africa

Introduction: A large number of patients in South Africa who test for HIV do not return to collect their CD4 count results and are therefore unable to start antiretroviral therapy. Immediate triage of the patient with a same-day CD4 count may improve initiation rates. We evaluated the accuracy of CD4 results obtained from a flow cytometry machine (FACSCount) operated by staff at a primary health care facility.

Methods: Primary care nurses and lay counselors underwent initial training by the manufacturer and the related laboratory. Blood samples from HIV-positive patients were tested on site and then sent to the reference labora- tory for analysis by routine PLG/CD4 testing on XL flow cytometer (Beck- man Coulter). Intra-operator variability was assessed. Graph Pad Software for Bland-Altman analyses and percentage similarity comparison of absolute CD4 count were used for statistical analysis of results.

Results: In total, 233 samples were tested. CD4 count range: 7 - 1585 cells/ µl on the FACSCount and 9 - 1335 cells/ µl on the reference method. An agree- ment of 104.2±4.7% (95% CI of 97% - 109%) was observed with an overall positive bias of 27.4±57.6. There was good correlation between FACSCount and PLG/ CD4 absolute counts (Spearman r=0.969, p< 0.001). Samples with a CD4 count >200 had a positive bias of 16.63±10.9 compared to a positive bias of 33.42±67.6 for counts >200 cells/µl. Tracking at the laboratory showed 100% comparison between tripler and tripler with negligible bias. On the other hand, a 99% comparison between operators.

Conclusions: Non-laboratory clinic staff were trained successfully to analyze patient samples accurately when compared with the reference laboratory. Variability between operators was negligible. Point of care diagnostics therefore offers a viable option for decentralized testing in resource constrained settings.

Presenting author email: mfaal@ru.ac.za
**WEPE203**

National scale-up of early infant diagnostic testing for HIV exposed infants in Cambodia

- M. Chhi Vun1, *S. Fuangh1, S. Tripathi1, Z. Katz1, S. Chin2, P. Campbell3, R. Gaal4, 1A. Chatterjee1, C. Luo1
  
1Ministry of Health, NOHADS, Phnom Penh, Cambodia, 2UNICEF Cambodia Office, Phnom Penh, Cambodia, 3UNICEF Headquarters, HIV Division, New York, United States, 4Clinton Health Access Initiative, Cambodia Country Office, Phnom Penh, Cambodia, 5UNICEF Headquarters, New York, United States

**Background:** The Cambodian National Early Infant Diagnosis (EID) service, launched in September 2007, has rapidly expanded in volume and geographic coverage, despite challenges of HIV testing in infants in low prevalence settings. Up to 2009, no comprehensive review of the national EID service had been conducted.

**Methods:** A retrospective analysis of 24 randomly selected EID collection sites across 14 provinces which collected 91% of the cumulative national EID samples volume was completed in October 2009. Central laboratory practice, site EID procedures and EID sample volume were reviewed.

**Results:** Since the national service launched, EID collection sites increased from 2 to 26, currently covering 16/24 provinces. 919 EID tests were performed through the national program (15% 2008 EID coverage), with a total sample positive rate of 14% showing minimal trends in positivity over time. Average age at testing across reviewed sites is 5.3 months. Despite an informal sample transportation mechanism, only one site reviewed had an average time from sample collection to result availability at central laboratory of ≥30 days. Of 100 infants testing positive via PCR across 24 reviewed sites, 90% of results were returned to caregivers. 33% of infants testing positive via EID were known to be alive and on ART at time of review, indicating attrition post test result return.

**Conclusions:** Rapid improvements have been made towards increasing access to PCR testing in a low prevalence context. EID decentralization, mini-labs and PCR testing have resulted in program strengths. However, sites still struggle to test early and ensure all HIV-positive infants receive ART. Moving forward, efforts must focus on increased coverage, but also ensuring the full continuum of care during and post testing. The analysis and its findings are guiding National efforts to maximize the impact of EID and early ART intervention.

Presenting author email: sokpatha88@nhads.org

---

**WEPE204**

Introducing laboratory services to rural clinics in Swaziland to scale-up HIV counseling and testing

- M. Dlamini1, H.S. Sukwat1, V.L. Masuku2
  
1Population Services International, HTC, Manzini, Swaziland, 2Ministry of Health, Swaziland

**Issues:** Swaziland began transitioning to a provider initiated approach to HIV counseling and testing (CT) in all health facilities in 2007. However, the uptake of services remained low. Through its CT support to 24 health facilities, PSI/Swaziland discovered that most nurses only counsel without any point of care rapid testing. PSI helped pilot the use of a phlebotomist cadre to increase provider initiated HIV counseling and testing.

**Description:** In 2008, in collaboration with the Ministry of Health, PSI helped expand existing laboratories and established 12 health facilities that served more than 100 clients/day and that offered pre-antiretroviral therapy (ART) and ART services. Phlebotomists attached to the mini-laboratories provide simple haematology tests including RPR, Hb, HIV test, Urinalysis, pregnancy test, glucose and malaria test. The phlebotomists are high school graduates with a science and maths subject credit in their certification. They were recruited and trained for five days in phlebotomy and CT by American Society for Clinical Pathology (ASCP) and the National Healthcare, where they were provided with the equipment to be part of post-train mentoring, and one phlebotomist was attached to each facility.

**Lessons learned:** Prior to the implementation of the project, an average of 300 people per month accessed CT services in all 12 sites. After implementation that number increased to 1,200 per month. Neighboring clinics receive clients’ blood samples to the mini-labs, increasing access to laboratory services beyond the 12 facilities. A national, standard phlebotomists training curriculum and manual was developed for future program expansion. The Ministry of Health took ownership of the project, absorbing the new positions into the health facility staff.

**Next steps:** In collaboration with partners, the program is expanding to facilitate scale-up. A transportation system, which currently required a clinic staff taking public transport, is being expanded to include collaboration with transport agents to increase laboratory service coverage.

Presenting author email: khosi@psi.sz

---

**WEPE205**

Innovative CD4 lymphocyte testing for rural communities in Northern Uganda

- A. Ocero1, L. Ciccol2, D. Sera, M. Makumbi, B. Opolot, E. Ngoma, M. Nsubuga
  
1UNICEF, Uganda Malaria AIDS Tuberculosis Program (NUMAT) is a USAID-funded program supporting ART implementation in 5 post-conflict districts improving antiretroviral access to turning populations. NUMAT targeted 28 lower level rural facilities to improve ART services beyond the 12 facilities. A national, standard phlebotomists training curriculum and manual was developed for future program expansion. CD4 test quota were offered to ART facilities based on their workload, prioritization and achievement. Individual results were given at next visit.

**Lessons learned:** In 2008 and 2009, clients receiving care at 28 rural ART centers who accessed a CD4 test were 4,900 and 11,860 respectively. In 2009, 2,647 clients initiated ART representing a 69% increase in recruitment and 87% were initiated after a CD4 test. The proportion of children accessing ART increased from 6% to 14% of all new clients. There was a 252% increase in the number of pregnant women accessing ART. Lower level ART centers were better utilized promoting the decongestion of larger centers. The outreach model facilitated easier access to clients in remote areas. Outsourcing relieved NUMAT of the management burden allowing better supervision.

**Next steps:** Outsourcing CD4 testing offers advantages and allows equitable allocation of limited resources for a quality ART service. It should be critically evaluated and further promoted.

Presenting author email: accero@numatuganda.org

---

**WEPDF101**

Integrating legal services into antenatal and postnatal care for HIV-positive and HIV negative women in South Africa

- S. Maman1, D. Holness1, D. Moodley2, A.K. Groves1, P. Rousse1, T. Ezen3
  
1University of North Carolina at Chapel Hill, Health Behavior and Health Education, Chapel Hill, United States, 2University of Kwazulu-Natal, Faculty of Law, Durban, South Africa, 3University of Kwazulu-Natal, Women’s Health and HIV Research Unit, Department of Obstetrics and Gynaecology, Durban, South Africa

**Background:** Pregnancy raises a number of health and social risks for all women, and HIV-positive women in particular. Access to maternal and child health care system during pregnancy represents an opportunity to address these issues. Access to legal services for pregnant women in settings like South Africa has been a major challenge. Bringing these services into health care settings during pregnancy is one approach that could reduce the spread of HIV and provide support to women.

**Methods:** The South Africa HIV Antenatal Post-test Support Study (SAHAPS) is a randomized controlled trial designed to evaluate the efficacy of enhanced post-test support for HIV-positive and HIV-negative pregnant women in Durban, South Africa. 1245 women have been enrolled and randomized to receive either standard PMTCT services or a model that includes enhanced post-test support. Access to onsite legal services, through legal education and legal as- sistance, is one component of the enhanced model.

**Results:** A total of 611 women have been offered legal services. Sixty-nine women (11.3%) sought legal assistance from an onsite attorney and had a legal file opened for them, and 25 of these women had legal files opened on more than one issue. A total of 83 cases were opened including child maintenance (n=39), protection orders (n=10), labor disputes (n=10), child related legal issues (n=7), discrimination (n=5), housing (n=5) and smaller numbers of other cases. They were recruited and trained for five days in phlebotomy and CT by American Society for Clinical Pathology (ASCP) and the National Healthcare, where they were provided with the laboratory to be part of post-train mentoring, and one phlebotomist was attached to each facility.

**Lessons learned:** Prior to the implementation of the project, an average of 300 people per month accessed CT services in all 12 sites. After implementation that number increased to 1,200 per month. Neighboring clinics receive clients’ blood samples to the mini-labs, increasing access to laboratory services beyond the 12 facilities. A national, standard phlebotomists training curriculum and manual was developed for future program expansion. The Ministry of Health took ownership of the project, absorbing the new positions into the health facility staff.

**Next steps:** In collaboration with partners, the program is expanding to facilitate scale-up. A transportation system, which currently requires clinic staff taking public transport, is being expanded to include collaboration with transport agents to increase laboratory service coverage.

Presenting author email: khosi@psi.sz

---

**WEPE206**

District Level Lawyers Group (DLLG): a place to create an enabling environment of sexual minorities in Bangladesh

- A. Shake1
  
1Bandhu Social Welfare Society, Executive Director, Dhaka, Bangladesh

**Issues:** The violence, harassment and abuse towards MSM/Hijra population are common experiences and significantly high in Bangladesh. This seriously impacts on self-esteem and impede successful outcomes in education and changing health seeking behaviours amongst MSM. In order to promote advo- cacy activities to address this, and foster a culture of human rights and posi- tive changes in legal, judicial and social attitudes regarding MSM/Hijra population, Bandhu Social Welfare Society (BSWS) has developed a legal services model, outsourcing it to a medical logistics company. CD4 test quota were offered to ART facilities based on their workload, prioritization and achievement. Individual results were given at next visit.

**Description:** In 2008 and 2009, clients receiving care at 28 rural ART centers who accessed a CD4 test were 4,900 and 11,860 respectively. In 2009, 2,647 clients initiated ART representing a 69% increase in recruitment and 87% were initiated after a CD4 test. The proportion of children accessing ART increased from 6% to 14% of all new clients. There was a 252% increase in the number of pregnant women accessing ART. Lower level ART centers were better utilized promoting the decongestion of larger centers. The outreach model facilitated easier access to clients in remote areas. Outsourcing relieved NUMAT of the management burden allowing better supervision.

**Next steps:** Outsourcing CD4 testing offers advantages and allows equitable allocation of limited resources for a quality ART service. It should be critically evaluated and further promoted.

Presenting author email: accero@numatuganda.org
Lessons learned: Over the past two years it was found that effective advocacy work has really helped create positive attitudes of lawyers and helps them understand issues of sexual minorities. The LACE inter-network has developed and local levels MSM/Hijra populations now easily access these lawyers for any legal support. Discussions are now taking place for principled and discriminatory laws and policies especially in regard to section 377 of BPC, section 54 of Criminal Procedural Code and section 34 of Police Regulation Book which criminalise same sex behaviours.

Next steps: Even a country like Bangladesh, which is a traditional, conservative Muslim society, BASHO has shown it is possible to work closely with a range of stakeholders including lawyers. Key elements involve strong and subtle advocacy, excellent capacity building, and strong vision of change. BASHO is now engaged in the process of developing a national HIV and human rights taskforce having support from government of Bangladesh. Presenting author email: shakel@bandhu-bd.org

WEPDF103

Strengthening and expanding HIV-related legal services and rights in Latin America

J.J. Hernández-Chávez1, S. Nardicchia1, O. Perez1, D. Patterson1

1Colectivo Sol A.C., Mexico City, Mexico, 2International Development Law Organization, HIV and Health Law Program, Rome, Italy

Issues: In 2008 UNAIDS estimated that 2 million people were living with HIV in Latin America. Although described as a concentrated epidemic in most countries, HIV in Latin America has grown among women, indigenous populations and prisoners. Prevention efforts have been hindered by insufficient attention to human rights and sexual health, and by inadequate monitoring and evaluation.

Description: In early 2010, 30 legal and community activists from around Latin America convened in Mexico City to identify: i) emerging challenges and opportunities in using the law and legal mechanisms to address discrimination against people living with and affected by HIV, and key populations; ii) opportunities for greater regional networking and advocacy; and; ii) opportunities to strengthen legal and regional levels to influence key stakeholders to strengthen the enabling legal and policy environment for the response to HIV and AIDS. The meeting resulted in recommendations and elements of an action plan to address these challenges and opportunities.

Lessons learned: Capacity building and support for legal services are essential for legal action to address human rights violations. By addressing discrimination and empowering communities, expanded legal services will also increase access to prevention, treatment, care and support services. Case data collected and analyzed will support evidence-based reforms. Several countries have well-functioning HIV legal services. These need to be documented, evaluated and adapted for scale up.

Next steps: A work plan to strengthen and expand HIV-related legal services in the region will be developed, with links made to law reform and advocacy agendas, building on international law and best practices. Regional and inter-regional networking will share experiences and strategies for capacity building and advocacy, using electronic media such as AIDSLex and other forums.

Presenting author email: snardicchia@idlo.int

WEPDF104

Human rights and healthcare go hand-in-hand in rural Kenya

M. Murgugi1, F. Quigley2

1Legal Aid Centre of Eldoret (LACE), Eldoret, Kenya, 2Indiana University School of Law, Indianapolis, United States

Issues: A persistent pattern of human rights violations experienced by persons living with HIV calls for the integration of legal support with healthcare. Using the model of a human rights law clinic, legal services were integrated into AMPATH (Academic Model Providing Access to Healthcare), which is one of the largest and most holistic responses to the African HIV/AIDS pandemic. The Legal Aid Centre of Eldoret (LACE) was established within the AMPATH Centre in Eldoret and accepts client referrals from the AMPATH medical and social services staff. LACE also works closely with the Me Reaching and Referral Hospital-based Center for Assault Recovery-Eldoret (CAR-E), which responds to incidents of gender-based violence.

Lessons learned: Close association with a community-based HIV care provider allowed LACE to effectively represent and counsel 336 HIV-positive clients in 2009 in cases including land and inheritance issues, gender-based violence prosecutions, defense from debt collection and criminal charges, family law and defamation claims associated with actual or perceived HIV status. LACE also partnered with AMPATH to educate persons living with HIV/AIDS, care providers, and the broader community on the legal rights of persons with HIV. Challenges of such a care/advocacy partnership included maintenance of patient/client confidentiality and fully defining and communicating the respective scopes of each organization’s mission.

Next steps: LACE intends to expand direct service through the training and employment of HIV-positive AMPATH patients as paralegals assigned to satellite offices connected to AMPATH clinics in rural areas of western Kenya. Also, LACE’s network of volunteer advocates and law students will be mobilized to train and support other community leaders in the basics of legal rights, so those leaders can be empowered to effectively mediate disputes and refer people to LACE for formal legal assistance when appropriate.

Presenting author email: quilip@iu.edu
WEPE0001  
Frequency of primary resistance to antiretroviral drugs among pregnant women in Luanda, Angola

E. Castelbranco, Pregnant Women  
National Institute of Public Health of Angola, Molecular Biology, Luanda, Angola

Background: The determination of the prevalence of primary resistance to antiretroviral therapy in different places in the world is of extreme importance in molecular epidemiology monitoring and it can guide the initial patient treatment in a given geographical area.

Methods: Biological samples of 57 pregnant women recently diagnosed HIV-positive participating in the MCTC program from Luanda-Angola were collected between November 2008 and January 2009 and were tested for viral load quantification and TCD4+. Molecular characterization of HIV was performed by OpenGene DNA sequencing system of genome HIV-1 \[\text{pol}\] in the pol region.

Results: 36 (63.2%) out of 57 samples were sequenced, one (2,8%) mutation associated with resistance nucleotide reverse transcriptase inhibitors was detected and two (5.6%) mutations associated with resistance to non-nucleoside reverse transcriptase inhibitors were also detected. Primary mutations associated with INRTN and INRTM were detected in two (5.6%) pregnant newly diagnosed HIV-1 infected women. None of the primary mutations associated with protease inhibitors was found. Subtypes A1, C, D, CRF02_AG, F1, G, H and J were detected.

Conclusions: The presence of primary resistance in this treatment-naive pregnant population was low, but the genetic variability in Angola was very high.  
Presenting author email: emingardacastelbranco@hotmail.com

WEPE0002  
Genetic diversity of HIV-1 in a cohort of women in Nairobi, Kenya

A. Nyamache1, Z. Nganga1, A. Muigai1, S.A. Khamadi3  
1Jomo Kenyatta University of Agriculture and Technology, Medical Microbiology, Nairobi, Kenya, 2Jomo Kenyatta University of Agriculture and Technology, Medical Laboratory, Nairobi, Kenya, 3Kenyay Medical Research Institute, Centre for Virus Research, Nairobi, Kenya

Background: HIV-1 genetic heterogeneity represents a major challenge for the public health care system and for the development of therapeutic and immunization strategies. The rapid evolution of HIV within infected hosts contributes significantly to the elusiveness of this pathogen from host antiviral responses, and remains a formidable challenge to the development of an effective AIDS vaccine whether based on induction of cellular or humoral immune responses.

Objectives: To document HIV genetic diversity in a cohort of HIV-infected women in Nairobi Kenya.

Methods: In this study, blood samples were collected from consenting adult women cohort attending a comprehensive HIV clinic in Nairobi and on a three year follow up till end of 2011. Proviral DNA was extracted from lymphocytes and nested polymerase chain reaction testing (PCR) done to amplify a 697 base pair pol region. Amplified samples were sequenced directly using BigDye technology and data generated used to construct phylogenetic trees with neighbor-joining algorithm plus bootstrap replicates. For unassigned-genotype pol sequences, evidence of recombination was then determined by using sliding-window based bootscan plots and their epidemiological patient background information was also collected.

Results: This study highlighted the extent of HIV-1 genetic diversity in Hong Kong. Subtype B (450/1045; 43.1%) and CRF01_AE (469/1045; 44.9%) variants remain predominant. Among the non-B/non-CRF01 samples (126/1045; 12.1%), 3 subtypes, 9 CRFs, 1 unassigned subtype and another 37 URFs with 9 mosaic combinations were observed (Table 1). Interestingly, URFs with CRF02_AG and subtype G recombination were found circulating among the non-Chinese Asians in Hong Kong through heterosexual transmission starting from 2007 while the subtype B and CRF01_AE recombinants were found among the local Chinese population mainly through sexual transmission route starting from 2004.

Conclusions: This study demonstrated the complex recombination of HIV-1 in Hong Kong. The high number of mosaic patterns in the pol gene suggests that the actual diversity of recombination in the HIV-1 genome in our region should be much higher. Thus, a surveillance system is necessary for tracking the distribution of new HIV-1 genetic variants in Hong Kong.

[Table 1]  
Presenting author email: jonchk@hkusc.hku.hk
WEPE0005
Decreased HIV diversity after allogeneic stem cell transplantation of an HIV-1 infected patient

C. Kamp, T. Wolf, I. Bravo, A. Thielen, A. Werner, B. Schnierle

Background: The human immunodeficiency virus type 1 (HIV-1) is a retrovirus that infects and replicates in T cells. It is responsible for causing AIDS. HIV-1 is classified into different subtypes based on the comparison of their genetic sequences. The diversity of HIV-1 is influenced by various factors, including treatment, immune response, and viral mutation. This study investigated the decrease in HIV diversity after allogeneic stem cell transplantation (SCT) of an HIV-1 infected patient.

Objectives: The objective of this study was to determine the decrease in HIV diversity after allogeneic stem cell transplantation in a patient with HIV-1 infection.

Methods: The patient's pre-transplant and post-transplant HIV sequences were analyzed using phylogenetic methods. The diversity of HIV-1 was assessed using the nucleotide difference method.

Results: The pre-transplant HIV diversity was high, with a nucleotide difference of 0.02. After SCT, the diversity decreased significantly, with a nucleotide difference of 0.001. This indicates a decrease in HIV diversity post-transplantation.

Conclusions: The decrease in HIV diversity after allogeneic stem cell transplantation suggests that the transplanted stem cells may have contributed to the decrease in viral diversity. Further studies are needed to confirm these findings.
WEPE0009

Co-receptor tropism and genetic analysis of gp120 V3-V4 region from India: implications for CCR5 antagonist usage and vaccine development

U. Negoi1, A. Sheft2, B.S. Parthana, G. De Souza3, V. Sreedharan, A.D. Costa1, A. Wenbü2, A.C. Banerjee3
1St. John’s National Academy of Sciences, Bangalore, India, 2Karolinska Institutet, Division of Global Health, Stockholm, Sweden, 3Post Graduate Institute of Medical Education and Research, Chandigarh, India, 4National Institute of Immunology, New Delhi, India

Background: The third variable region (V3) of the human immunodeficiency virus type 1 (HIV-1) envelope gp120 subunit participates in determination of viral infection, co-receptor tropism and host immune responses. Understanding co-receptor tropism and genetic diversity of HIV-1 strains circulating in India is critical for HIV treatment and vaccine development.

Methods: Overall, 1054 HIV-1C sequences were analyzed; the V3-V4 region from 21 isolates (15 HIV-1-infected patients from South India and 6 from North India) were amplified and sequenced, while the remaining 1033 HIV-1C sequences were retrieved from the Los Alamos HIV sequence database and analyzed for co-receptor tropism using three tools WebPSSM, Geno2pheno and (B) Karel.

Results: All 21 isolates were subtyped as HIV-1C which is predominant in India. HIV-1C V3 sequences from India were relatively homogenous in contrast to the commonly studied subtype B V3 sequences. South Indian HIV-1C V3 region was more diverse than North Indian strains [mean nucleotide distance; 0.197 ± 0.022 vs 0.162 ± 0.022; p < 0.001]. WebPSSM (B) Karel detected >99% of strains as R5 tropic whereas a novel HIV-1C specific matrix (SINSI) in WebPSSM detected >99% as R5 tropic.

Conclusions: This is the first time co-receptor tropism has been studied with available V3 sequence data from India. The higher prevalence of R5 tropism and low heterogeneity of V3 sequence in HIV-1C (Figure) suggests that CCR5 antagonists may have wide therapeutic applicability in India and that the V3 sequence may be a promising HIV-1 vaccine candidate.

WEPE0010

High HIV-1 genetic complexity in men who have sex with men (MSM) in Bangkok, Thailand

W. Leelawat1, M. Arroyo2, F. Mueangai3, O. Konpechonnit1, W. Leelawan1, V. Assawadabach1, M. de Souza2, S. Chakkumkrai1, W. Chonwattana1, J. Tongtoyai1, A. Sangiamkittikul1, F. van Griensven1,3, W. Rutvisuttinunt2, V. Assawadarachai2, M. de Souza2, S. Chaikummao1, R. Kuchenbecker4, C. d’Almeida4
1Thailand MOPH - U.S. CDC Collaboration, Department of Medical Sciences, Nonthaburi, Thailand, 2Department of Retrovirology, Armed Forces Research Institutes, United States, 3Caxias do Sul University, Caxias do Sul, Brazil, 4National Institute of Clinical Pharmacology, Chagas, Rio de Janeiro, Brazil

Background: The HIV-1 epidemic in Thailand is characterized by infections with CRF01_AE, which predominates, and Thai B (B’). Both these subtypes and O1 are available V3 sequence data from India. The higher prevalence of R5 tropism and low heterogeneity of V3 sequence in HIV-1C (Figure) suggests that CCR5 antagonists may have wide therapeutic applicability in India and that the V3 sequence may be a promising HIV-1 vaccine candidate.

Results: All 21 isolates were subtyped as HIV-1C which is predominant in India. HIV-1C V3 sequences from India were relatively homogenous in contrast to the commonly studied subtype B V3 sequences. South Indian HIV-1C V3 region was more diverse than North Indian strains [mean nucleotide distance; 0.197 ± 0.022 vs 0.162 ± 0.022; p < 0.001]. WebPSSM (B) Karel detected >99% of strains as R5 tropic whereas a novel HIV-1C specific matrix (SINSI) in WebPSSM detected >99% as R5 tropic.

Conclusions: This is the first time co-receptor tropism has been studied with available V3 sequence data from India. The higher prevalence of R5 tropism and low heterogeneity of V3 sequence in HIV-1C (Figure) suggests that CCR5 antagonists may have wide therapeutic applicability in India and that the V3 sequence may be a promising HIV-1 vaccine candidate.
**WEPE0013**

HIV-1 env subtypes and disease progression in a cohort of HIV-1 positive individuals from Rio de Janeiro, Brazil

M.L. Guimarães1, T.C.F.N. Leite1, S.L.M. Teixeira1, V.G. Veloso1, D.P. Campos2, M.G. Morgado1

1Osvaldo Cruz Institute, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, 2Clinical Research Institute Evandro Chagas (IFEC), Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

Background: Rio de Janeiro city has a co-circulation of HIV-1 subtype B, F, variant B8 of the B subtype and BF recombinants. Treatment and laboratory monitoring are offered for free throughout the public health system. The influence of these subtypes and HIV variants on disease progression is still a matter of controversy. Factors related to both virus and host characteristics, as well as the epidemiological context, may be of importance. Thus, the aim of this study is to define the env subtype in a cohort of HIV-1-positive patients presenting different profiles of disease progression.

Methods: The HIV-1 patients from IFEC were classified according to their progression to AIDS in typical progressors (CD4<350 or clinical symptoms 5-7 years after infection) and rapid progressors (CD4< 350 < 3 years of infection). HIV-1 proviral DNA was extracted and the samples were amplified by env nested PCR, aligned with HIV-1 reference sequences by Clustal X. For phylogenetic inference the Mega 4.0.2 program was used. The Fisher exact test was performed to verified possible correlations between HIV-1 subtypes and AIDS progression.

Results: Up to now, 22 HIV-1 individuals were categorized as rapid progressors. Of them, 50% were classified as subtype B, 27.2% as B8 and 22.8% as F1. From the 24 HIV-1 individuals having a typical progression to AIDS subtypes defined 75% as B, 20.8% as B8 and 4.2% as C. Preliminary data point to a statistically significant association of rapid progression to Aids and HIV-1 subtype F1 infection (p = 0.019).

Conclusions: If the HIV-1 subtype F1 is associated to a shorter individual survival and, as a result, these strains would be less transmitted in the population, this could explain the low rate (10-15%) maintained for this subtype in Rio de Janeiro.

Presenting author email: monickgl@ioc.fiocruz.br

**WEPE0015**

Uniform CCR5 usage in a panel of HIV-1 subtype G plasma-derived functional envelope clones

A. Revilla1, E. Delgado1, Y. Vega2, L. Jiménez1, M. González-Galeano1, M. Pinilla1, A. Ocampo3, M.J. Lezarr1, R. Díezsa, R. Rodríguez1, P. Ordóñez4, S. Pérez5, L. Fernández-Rodríguez5, M.M. Thomson6

1Instituto de Salud Carlos III (Campus Majadahonda), Biology and Variability of HIV, Majadahonda, Spain, 2Complejo Hospitalario Xeral-Cies, HIV Unit, Vigo, Spain, 3Virology Unit, Microbiology, Alava, Spain, 4Complejo Hospitalario Provincial, HIV Unit, Pontevedra, Spain, 5Complejo Hospitalario Donostia, Microbiology, San Sebastián, Spain, 6Complejo Hospitalario Santa María Madre, Orense, Spain, 8Hospital Arquitecto Marjor, Microbiology, Ferrol, Spain, 9Complejo Hospitalario Universitario, Microbiology, Vigo, Spain, 10Complejo Hospitalario Cristal Píñor, Orense, Spain

Background: Subtype G represents the 4th most prevalent clade in the global HIV-1 pandemic. However, there are insufficient data on coreceptor utilization by subtype G viruses.

Objectives: To determine coreceptor usage by HIV-1 subtype G isolates using a panel of functional envelope clones obtained from plasma of HIV-1-infectected individuals.

Methods: Full-length envelopes were amplified from plasma RNA by a single genome amplification RT-PCR assay and cloned into an expression vector. Envelope clones were co-transfected with an Env-deficient HIV-1 construct in 293T cells, generating pseudovirions, which were used to infect TZM-bl reporter cells, which express CCR5 and CXCR4, in addition to luciferase under entry, with a signal/background luminescence ratio ≥50 in the TZM-bl assay.

Results: Cloned envelopes from 16 individuals were highly functional for cell entry, with a signal/background luminiscence ratio ≥50 in the TZM-bl assay. Phylogenetic analyses revealed that envelopes were uniformly of subtype G, 12 clustering with the Spanish-Portuguese variant, 1 with the Cuban variant, 1 with a Nigerian cluster and 1 with a Kenian virus. When tested in GHOST cells, envelopes from all 16 individuals, including 7 from AIDS patients, exhibited an R5 phenotype, which was also predicted by 4 different genotypic methods.

Conclusions: CCR5 monotropism was uniformly observed among 16 HIV-1 subtype G functional envelope clones, even at advanced stages of the infection.

Presenting author email: anarevilla@isciii.es

**WEPE0014**

Analysis of HIV-1 strain diversity at a clinical site in London, England

V. Holzmaier1, V. Hay1, P. Swansea1, A. Abedi2, G. Schuchteman1, L. Jackett1

1Abbott Diagnostics, Abbott Park, United States, 2The Courtyard Clinic, St. George’s Hospital, London, United Kingdom

Background: HIV-1 is characterized by extensive genetic diversity and a rapid rate of evolution. Phylogenetic analysis has revealed four distinct groups of HIV-1 (M, N, O and P) and subtypes designated as A-K. Recombination has originated in South America. To date, only 2 weakly functional envelope clones have been identified. In this study, we examine the level of HIV-1 diversity within patients attending the Courtyard Clinic at St. George’s Hospital in London, England.

Methods: Plasma and whole blood were collected from 181 patients consis- ted at risk for infection with non-subtype B strains. Subtype was determined by sequence/phylogenetic analysis (Phylip v3.5c) of gag p24, pol integrase and env glycoproteins (Phylogenetic System, Celera, Alameda, CA) which was performed on a subset of 112 specimens. Viral loads were measured us- ing the Abbott RealTime HIV-1 assay and automated m2000 system (Abbott Molecular, Des Plaines, IL).

Results: Amplification and sequencing were successful for 178 of the 181 patients. Phylogenetic analysis revealed that 154/178 (86.5%) of patients harboured non-subtype B strains. These included 49 A, 55 C, 12 D, 4 G, 1 CRF01_AG, 10 CRF02_AG, 3 CRF06_cpx, 1 CRF07_cpx and 19 unique recombinant viruses. Based on gag/pol/env, the unique recombinants included: 3 A/D0, 4 D/D1a, 2 G/D1a, and 1 each of A/D0, A/G/D6, A/10D0, A/D0/A, G/A/A, G/D0/D1a, G/D0/D2, G/D0/G2, 02/G/D0/B10. Viral genotyping was successful on 109 of 112 specimens with RealTime HIV-1 viral load ranging from 2.26- 6.16 copies/ml.

Conclusions: A remarkably high level of HIV-1 genetic diversity was ob- served at this clinical site in London reflecting epidemiologic links with 22 countries (16 African) outside of U.K. The continual evolution and redistribution of HIV-1 strains has important implications for diagnostic and patient monitoring technologies.

Presenting author email: john.hackett@abbott.com

**WEPE0016**

Construction of a panel of functional HIV-1 envelope clones of subtype F

E. Delgado1, A. Revilla1, P. Nebreda1, M. Róis1, G. Cilia1, L. María Jesús1, A. Marín2, A. Rakhranova2, S. Pérez-Castro2, S. Prietó Menchero2, S. Herráez1, M. González-Galeano1, M. Sánchez1, M. Pinilla1, L. Pérez-Álvarez1, M.M. Thomson1

1Instituto de Salud Carlos III (Campus Majadahonda), Biology and Variability of HIV, Majadahonda, Spain, 2Centro Nacional de Referencia de VHH de Chile, Santiago, Chile, 3Hospital Donostia, Guipúzcoa, Spain, 4Hospital Vigo, Vigo, Spain, 5Hospital Arquitecto Marjor, Microbiology, Ferrol, Spain, 6Hospital de Fuenlabrada, Fuenlabrada, Spain, 7Hospital de Basurto, Basurto, Spain

Background: HIV-1 subtype F circulates in Central Africa, Romania and Brazil. BF recombinants, with envelopes of subtype F, are prevalent in Argentina and Uruguay, and most BF circulating recombinant forms have originated in South America. To date, only 2 weakly functional envelope clones of subtype F and one BF recombinate have been reported.

Objectives: To obtain a panel of functional HIV-1 envelope clones of subtype F derived from plasma of HIV-1 infected patients.

Methods: Full-length HIV-1 envelopes, amplified by RT-PCR from plasma RNA using a single genome amplification assay, were cloned into an expression vector. Envelope clones were co-transfected with an Env-deficient HIV-1 plasmid in 293T cells, generating pseudovirions, which were used to test envelope functionality through infection of TZM-bl reporter cells, expressing CD4, CCR5, CXCR4, and luciferase under HIV-1 promoter control. Clones with a signal/background luminescence ratio >50 were considered highly functional.

Phylogenetic sequence analyses were performed with neighbour-joining trees and bootscanning. Predicted coreceptor usage was determined by infection of CCR5- and CXCR4-expressing GHOST cell lines, which express green fluorescent protein (GFP) upon transcriptional activa- tion by Tat. Four days after infection, the differential capacity of pseudovirions to infect each GHOST cell line was examined by fluorescence microscopy.

Results: Cloned envelopes from 16 individuals were highly functional for cell entry, with a signal/background luminiscence ratio >50 in the TZM-bl assay. Viral genotyping was successful analysing V3 sequences with Geno2pheno, web PSSM, the 11/25 rule and the net charge. Predicted coreceptor usage was determined analysing V3 sequences with Geno2pheno and the 11/25 rule and the net charge.

Conclusions: CCR5 monotropism was uniformly observed among 16 HIV-1 subtype G functional envelope clones, even at advanced stages of the infec- tion.

Presenting author email: anarevilla@isciii.es
**WEPE0017**

Emergence of A/K related HIV-1 recombinant samples in an outskirt area of Rio de Janeiro, Brazil

M.G. Morgado1, A. Rodrigues-Pedro2, C.A. Velasco-de-Castro1, C. Gaido1, M. Santin1, B. Grinzinzi1, J.H. Piotto2
1Hospital Geral de Nova Iguacu, Nova Iguacu, Brazil, 2Evandro Chagas Clinical Research Institute (FIOCRUZ/RJ), Rio de Janeiro, Brazil, 3Hospital Geral de Nova Iguacu, Nova Iguacu, Brazil

**Background:** HIV is characterized by its rapid evolution due to mutations/deletions/insertions and recombination events, rapidly increasing its diversity worldwide. Globally, the predominant viral forms are subtypes A and C, followed by subtype B and the recombinants CRF01-AE and CRF02-AG. Subtype B is the most prevalent in Brazil, followed by subtype F and B recombinants in most parts of the country, exception for the South where subtype C predominates. The aim of the present study is to describe the emergence and characterize the near full-length genomes of HIV-1 isolates showing A and K-like recombinant profiles.

**Methods:** Five unlinked HIV-1 recombinant samples were identified in three independent studies conducted with HIV seropositive individuals from an outskirt area of Rio de Janeiro, Brazil. Genotyping of gag-pol/C2-V3 (550bp) and gag-pol (HXB2 893-4104) were performed using a nested PCR protocol. Near full-length genome sequencing (around 8,500 pb) was possible for three of them, DNASTAR and MEGA 4 were used for edition, alignment and phylogenetic analysis (neighbor-joining). SIMPLOT was used to assess recombination genomes.

**Results:** The 5 HIV-1 samples were first identified as having a subtype K fragment in the reverse transcription region. Additional phylogenetic analyses of the gag-pol regions (3,211bp) confirmed their relationship with subtype A and AIDHC and CRF01-AK1 recombinant reference samples. Bootstrap analyses showed that at least three of them (OM085156.9, B36797.1, 080586.1) had a gag-pol AUK profile, with very similar breakpoints, and another sample (080586.10) had a gag-pol AK profile observed in the last two years. Sample 080586.10 presented A and K fragments in the gag-pol region with distinct breakpoints. Sample 080586.11 presented a BABK gag-pol/Bref profile. Exception for sample 080586.118 (subtype G), all others have subtype A assigned for the env C2-V3 region.

**Conclusions:** The implications of these AK recombinant viruses, identified for the first time in Brazil, for the local epidemic profile should be addressed. Presenting author email: mmorgado@isc.unicamp.br

---

**WEPE0018**

Association between heterosexual exposure and infection with B/C and C subtype HIV-1 in Southern Brazil

O. Bacon1, R. da Silva de Souza1, S. Frost1, R. Dias1, S. Pillai2, R. Diaz3, R. D. Sperhacke2, E. Charlesbois5, F. Hecht5, C. Pilcher5
1Instituto de Salud Carlos III, Biology and Variability of HIV, Majadahonda, Spain, 2Complejo Hospitalario Universitario Xeral Cies de Vigo, Vigo, Spain, 3Complejo Hospitalario de Pontevedra, Pontevedra, Spain, 4Hospital Arquitecto Morcillo, El Ferrol, Spain, 5Hospital Xeral Calde de Lugo, Lugo, Spain

**Background:** In 1999, we started up HIV-1 protease-reverse transcriptase (PR-RT) sequence analyses from plasma samples obtained from patients attended at Hospitals from Galicia (North Western Spain).

**Objective:** Retrospective analysis of prevalence of HIV-1 non-B genetic forms in Galicia along the last decade.

**Methods:** Since 1999 we have analysed plasma samples from 2510 HIV-1 infected individuals. Plasma and PBMCs were isolated from patients attending Hospitals from Galicia (North Western Spain). A 1500 bp pol fragment was amplified by nested RT-PCR. Phylogenetic analyses of PR-RT sequences were performed with SeqMan, BioEdit, MEGA and SimPlot programs.

**Results:** Along the last 10 years we have identified 285 non-B HIV-1 infections among 2510 Galician patients (11%). The protease sequences (PR) and reverse transcriptase sequences (RT) of these viruses were compared with the reference sequence. The results were grouped according to their B/C subtype, the number of B/C recombinants, and infection with B/C subtype. The major non-B genetic forms were detected in Galicia were: subtype G (7% of non-B infections), CRF12_BF (3%) and CRF11_BA (3%). Group C was found in 21% of the isolates.

**Conclusions:** Molecular epidemiology of HIV-1 in Galicia has particular characteristics, different from other regions in Spain, with a high prevalence of subtype B and CRF12_BF recombinants. The implications of these AK recombinant viruses, identified for the first time in Brazil, for the local epidemic profile should be addressed.

Presenting author email: delgado@iscii.es

---

**WEPE0020**

Comparison of viral reservoirs and genetic characterization of HIV-1 isolates from plasma and PBMCs in individuals with rapid progression to AIDS

J.G. Prado1, J. Dalmau1, M. Rotger1, A. Rauch2, I. Erkizia3, A. Telleri4, J. Martinez-Picado1
1AIDS Research Institute (Ircniaqia Fundacion), University Hospital Germans Trias i Pujol, Badalona, Spain, 2Institute of Microbiology/University Hospital Center and University of Lausanne, Lausanne, Switzerland, 3University Clinic of Infectious Diseases/University Hospital Barn and University of Bern, Bern, Switzerland

**Background:** Humans show remarkable variation in the clinical outcome following HIV-1 infection. While some individuals are able to control HIV replication, others quickly progress to AIDS. We undertook this study in individuals with rapid progression (RP) to AIDS, define as a decline in CD4 count below 500/mm3 over 3 years after infection. Our aim was to compare plasma and PBMCs as source of HIV isolates and genetically characterize the isolates involved in RP.

**Methods:** We studied a group of 10 individuals with RP. Viral isolates were extracted from plasma samples by CD44-positive selection at baseline. In addition and for comparative purposes, 4 of those isolates were also obtained from cryopreserved PBMCs. RNA was extracted from total plasma and viral isolates. Gap and Pol genes were sequenced. To assess similarity between plasma and PBMCs reservoirs as source of virus isolates, Neighbor-Joining (NJ) phylogenetic trees were constructed for Gap and Pol. Replacing the gap with a stop codon was used to determine virus subtype. HLA high resolution typing was obtained from DNA in order to evaluate pre-existence of Gag CTL escape mutations.

**Results:** CD44-positive selection demonstrated to be a quick and reliable tool to obtain viral isolates from plasma. N9 tree for Gag and Pol showed concordance between viral sequences from plasma and PBMCs isolates. Most of the isolates were B subtype C (9/10) with a BF recombinant form (1/10). No major drug resistance mutations were identified. In the PR associated (SQV+RTV) resistance potentially due to subtype differences. Furthermore, we found an extensive accumulation of mutations in some Gag immunodominant CTL epitopes.

**Conclusions:** These data underline the pluri-identity of isolates obtained from plasma and PBMCs and highly the importance to define the genetic characteristics of circulating virus present in RP.

Presenting author email: jgprado@yahoo.es
WEPE0023
The effect of HIV superinfection on clinical status: insights from mathematical modelling

Á. Mórtan, A. Szlágyi, I. Scheuring, V. Müller
Eötvös Loránd University, Institute of Biology, Budapest, Hungary

Background: Superinfection (infection of an HIV-positive individual with another virus strain) has been shown to result in a deterioration of clinical status in many case studies. However, superinfection with no (or positive) clinical outcome might easily go unnoticed, and the typical effect of superinfection is unknown. We analyzed mathematical models of HIV dynamics to assess the effect of superinfection under various assumptions.

Methods: We analyzed the basic model of virus dynamics to explore systematically a large set of model variants incorporating various details of HIV infection (cytotoxic T cell-mediated killing, noncytotoxic immune responses against the virus, multiple target cell types, etc.). In each model, we identified the conditions for superinfection (i.e., the criteria for the infection of the chronic infected steady state by a second viral strain), and investigated whether and how a successful invasion affects the level of uninfected target cells. The equilibrium points of the systems and the criteria for invasion were derived analytically; to confirm this approach was impracticable, we simulated the dynamics with random parameter sets.

Results: In case of successful superinfection, the second strain can either exclude the initial strain, or establish stable coexistence. Under most assumptions, the criteria for invasion necessarily entail a decrease in the equilibrium abundance of uninfected target cells. However, in a model variant where coexistence is facilitated by a cross-reactive immune response, superinfection can increase the target cell level by eliciting efficient immune control.

Conclusions: Under most assumptions, only virus strains capable of reducing the target cell level can invade the chronic infected steady state. Thus, HIV superinfection is likely to have detrimental effect on the clinical status. However, we have also shown that, contrary to intuition, superinfection might also have a beneficial effect, if the immune response elicited by the invading virus strain is effective against both strains.

Presenting author email: morehagi@gmail.com

WEPE0024
Highly sensitive allele-specific PCR detects no evidence of limited HIV-1 superinfection events in couples with genetically divergent viruses and frequent sexual exposure

R. Atchison, J. McConnell, L. Bragg, R. Grant
1The J. David Gladstone Institutes, Gladstone Institute of Virology and Immunology, San Francisco, United States, 2University of California at San Francisco, San Francisco, United States

Background: Over 50 cases of sequentially expressed dual infections (SEDI) attributed to HIV-1 superinfection have been reported in the literature; the majority occurred in the first 3 years of infection. The San Francisco Positive Partners prospective study of HIV superinfection afforded an opportunity to probe virus populations with partner-virus-specific probes to determine if limited superinfection occurs in highly exposed couples.

Methods: Serocordant seroconcordant couples were selected from the cohort based upon high frequency of unprotected intercourse, genetically distinguishable viruses at baseline, and high level HIV-1 RNA. A sensitive allele-specific PCR method was developed to detect limited superinfection using partner-allele specific PCR. Primers were designed to recognize conserved sequences at exons 1 and 7 common to all DS segments.

Results: This assay has been used to analyze plasma from 8 pairs of HIV-1 serodiscordant partners with sexual relationships averaging 2.7 years in duration, and an average of 80.6 unprotected intercourse exposures per individual at the date of assessment. The average plasma RNA level was 128,163 RNA copies/ml (IQR = 111,625). Population sequencing indicated no evidence of limited superinfection using partner-allele specific PCR.

Conclusions: Serocordant seropositive couples provide the opportunity to look for evidence of systemic and limited superinfection where exposure to a genetically distinguishable virus is known. A highly sensitive assay to detect virus populations did not support the hypothesis that limited superinfection was common in couples. Immune responses that recognize partner-specific viral sequences have been identified, and may contribute to blocking superinfection in extensively exposed couples.

Presenting author email: ratchison@gladstone.ucsf.edu

HIV origin and evolution
WEPE0025-WEPE0031

WEPE0025
Tracing the origin and evolutionary history of HIV-1 CRF28_BF and CRF29_BF in Brazil: implication to the continuous emergence of new recombinant forms

M.R.S. Chip, N. Ristić, J. Zukovic, W. Alkmim, R.S. Diaz, M. Jannì
1Aaron Diamond AIDS Research Center, New York, NY, United States, 2Federal University of Sao Paulo, Department of Medicine, Sao Paulo, Brazil, 3Federal University of Sao Paulo, Department of Microbiology, Immunology, and Parasitology, Sao Paulo, Brazil

Background: CRF28_BF and CRF29_BF are genetically related HIV-1 inter-subtype recombinants. They were first identified in 1999 and played a significant role in the AIDS epidemic in Brazil. It is not known about their origin and if either CRF or their related recombinants are still prevalent in the population. Here, we reconstructed the evolutionary history of CRF28_BF and CRF29_BF coalescent inference to delineate the origin and epidemiology of these recombinants.
WEPE0026

Extensive HLA-driven viral diversity following a single-source HIV-1 outbreak in rural China

T. Dong1, Y. Zhang1, K. Xu2, H. Yan1, K. James1, Y. Peng1, J.-M. Biais1, S. Heyns1, C. Chen1, C. Zhang1, T. Rustin4, N. Lu3, Y. Mao2, X. Xu1, A. McMichael1, M. John3, S. Rowland-Jones1

1MRC Human Immunology Unit, Oxford University, Oxford, United Kingdom, 2Capital Medical University, Beijing, China, 3Murdock University & Royal Perth Hospital, Perth, Australia

Methods: We used a Bayesian coalescent method to analyze the reverse transcriptase and envelope gene of Brazilian subtype B HIV-1 and BF recombinants. The rates of nucleotide substitution of the two HIV-1 genotypes were determined, and were used to date the phylogenies and reveal the evolutionary history of CRF28 and CRF29.

Results: The most recent common ancestor of Brazilian subtype B HIV-1 and variants of the CRF28/29 clade was dated back to 1987.3 (95% HPD: 1979.1-1992.2). There is no significant difference between the phylogenies of CRF28 and CRF29 indicating that both strains have emerged at similar time periods and may have originated in Africa. After the emergence of these two clades, the effective number of infections by these recombinants grew exponentially between 1982 and 1991 but then decreased in infections toward present day following a logistic model of population growth. The decrease in infections by CRF28/29 appears to have coincided with the emergence of CRF39_BF and CRF40_BF in Brazil.

Conclusion: CRF28 and CRF29 have coexisted since the late 1980s. The spread of variants of the CRF28/29 lineage in rural China may have been driven by host factors. However, intersubtype recombinants with diverse genotypes continue to emerge in the Brazilian population. This highlights the need for further characterization on the replication capacity and antiviral susceptibility of these recombinants.

Presenting author email: mchin@adarc.org

WEPE0027

Retrospect analysis of ancestral relationship of circulating HIV-1 subtype B and A/A1 strains in India

U. Negi1, A. Karthika2, A. De Costa1, V. Sreeradha1, A.C. Banerjee1, U. Ramji3, Singh4

1St. John’s National Academy of Sciences, Bangalore, India, 2Karolinska Institutet, Division of Global Health, Stockholm, Sweden, 3National Institute of Immunology, New Delhi, India, 4University of Nebraska Medical Center, Omaha, NE, USA

Background: The Indian HIV-1 epidemic is dominated by subtype C strains. Little is known about non-subtype C strains such as B, A/A1 and circulating recombinant forms (CRFs) currently emerging in India.

Methods: We investigated molecular phylogeny, ancestral relationship and epidemic growth pattern of 54 HIV-1 B and 17 HIV-1 A/A1 env V3 sequences reported from India between 1992-2008 and available at the Los Alamos Database. Reference strains from other countries were obtained by BLAST search analysis and used for phylogenetic analysis. The evolutionary history was inferred by neighbor joining, Maximum Likelihood and UPGMA methods. Tree construction was performed using MEGA 4 software.

Results: Phylogenetic analysis detects polyphyletic HIV-1B and A/A1 circulating in India. The analysis of intra-subtype divergence and diversity showed that the env sequences of HIV-1B strains of India are significantly more diverse (distance of the most related sequences = 29%) than those of HIV-1A/A1 strains (p< 0.0001* and p< 0.002, Figure). The phylogenetic clustering data are suggestive of host factors. Divergence and diversity data are suggestive of an earlier, and/or faster spread of subtype B in India as compared to the A/A1 epidemics. This is consistent with laboratory observations indicating the dominance of the expansion of the non-subtype C epidemics in the Indian populations.

Presenting author email: taodong@imm.ox.ac.uk

WEPE0028

The evolution study of HIV-1 CRF01_AE subtype among injecting drug user in Taiwan

S.-A. Chen1, Y.-C. Yang1, W.-S. Lai1, H.-F. Liu1, Y.-C. Lan1, Y.-M.A. Chen1, E. Ido1, S. Karhemere2, S. Ahuka2, M. Omokoko1, M. Imani3, T. Tada1, S. Iwamoto1, N. Dauly4, Z. Kashongwe3, J.-J. Muyembe2

1China Medical University, Department of Health Risk Management, Taichung, Taiwan, Province of China, 2National Yang-Ming University, Department of Biomedical Informatics, Taipei, Taiwan, Province of China, 3Government Laboratory of Beijing Municipal Commission of Health, Beijing, China, 4National Institute of Infectious Diseases, National Institute of Medical Science, Tokyo, Tokyo, Japan

Background: The major of HIV-1 subtype are CRF07_BC, B and CRF01_AE in Taiwan. This study supported the evidence of origin and transmission pathway of HIV-1 CRF01_AE genotype in Taiwan.

Methods: We collected HIV-1 seropositive blood samples (N=310) from hospital in Taiwan in 2007. We use phylogenetic analysis to detect HIV-1 virus strains of the subtypes in env gene. The coalescent theory and molecular clock analysis were used to estimate the evolution rate and time for "The Most Recent Common Ancestors (MRCA)."

Results: There is clustering phenomenon after phylogenetic analysis revealed that a total of 9 CRF01_AE sequences, and the bootstrap values is greater than 75%. The variation of our cases and the sequences before Taiwan 2007 (n=20) is 0.998. Our cases are 89% from male and the average age is 35.7. Five of all sequences are IDUs (56%). The evolution rate of CRF01_AE is 8.2×10^-7 (9.4×10^-7,1.6×10^-6). The MRCA of CRF01_AE in Taiwan were dated to 1984.6 (1978.2-1989), and the skyline plot showed the CRF01_AE origin from 1985 in Taiwan.

Presenting author email: ann77111@gmail.com

WEPE0029

Molecular epidemiology of HIV in the Eastern part of Democratic Republic of Congo


1Kyoto University, Institute for Virus Research, Kyoto, Japan, 2National Institute of Biomedical Research, Kinshasa, Congo, the Democratic Republic of the, 3Catholic University of Bukavu, Bukavu, Congo, the Democratic Republic of the, 4University of Kisangani, Kisangani, Congo, the Democratic Republic of the

Background: Highly diversified HIV strains are said to be co-circulating in central African countries. However, molecular epidemiological information about DRC is quite limited. In particular, little is known in the eastern part of the country due to long-term political instability since early 1990s. This is the first genuine report of the genotypic analysis of HIV in the most recent years from two major cities, Bukavu in South Kivu Province and Kisangani in Oriental Province.

Methods: Blood samples were collected from a total of 180 AIDS-suspected patients who visited University Hospitals and nearby MSF clinics (Bukavu in 2007 and Kisangani in 2006 and 2008). The specimens were subjected to a RA screening test, and DNAs were extracted. Then nested PCRs were performed in the pol genomic region (288 bp). Based on the sequence data, a phylogenetic tree was constructed using the NJ method.

Results: Phylogenetic analyses revealed that the subtypes obtained from two provinces were rather similar: the predominant subtype was A (55-60 %) followed by various other subtypes such as G, C, D, B, F, and H. It should be noted that considerable numbers of isolates (14-20 %) were grouped into U (unclassified) in both cities.

Conclusions: The present distribution of HIV subtypes in eastern DRC can be partly explained by human migrations and events that occurred during the past decades. More importantly, it is still exhibiting the characteristic nature of a great genetic diversity especially in Kisangani, suggesting a hypothesis that the pandemic of HIV might have started somewhere in the Congo basin.
WEPE0030

Different evolution pattern of HIV-1 CRF07_BC and CRF01_AE among injecting drug users in Taiwan

Y.-C. Lan1, Y.-C. Yang1, H.-F. Liu, S.-Y. Lyu3, Y.-M.A. Chen2
1China Medical University, Department of Health Risk Management, Taichung, Taiwan, Province of China, 2Taiwan AIDS Quilt Association, Taipei City, Taiwan, Province of China, 3Mackay Memorial Hospital, Department of Medical Research, Taipei, Taiwan, Province of China, 4Taipei Medical University, School of Public Health, Taipei City, Taiwan, Province of China, 5National Yang-Ming University, AIDS Prevention and Research Center, Taipei, Taiwan, Province of China

Background: HIV-1 prevalence has increased rapidly among injecting drug users after 2004 and also increased among female and heterosexual populations now. It seems that Taiwan is following the path of some of the other Asian countries where HIV-1 infection is no longer confined to high-risk population. Tracking back the origin of the outbreak would help to prevent the next one. This study provides the molecular epidemiology evidence that the origin time and evolution rate of the virus strains circulating among IDUs.

Methods: Using the phylogeny analysis of HIV-1 env gene, we identified 464 cases of HIV-1 infection in Taiwan between 2006 and 2009. Moreover, population genetic analysis was performed on 72 HIV-1 env sequences representing CRF07_BC, CRF01_AE monophyletic strains from injecting drug users respectively. Genome-specific rates of evolution and divergence times were estimated using a Bayesian Markov chain Monte Carlo framework under various evolutionary models.

Results: The phylogenetic results identified three major circulating subtypes: 319 CRF07_BC (68.75%), 29 CRF01_AE (6.25%) and 116 subtype B (25.0%). For patients with known risk factors, the 98.0% of IDUs had CRF07_BC virus, whereas 2.0% of CRF01_AE infections and none of subtype B infections were acquired through injecting drugs. Further, the origin of CRF07_BC among IDUs was 2002.5 (2002.5-2006.1 95% HPD) respectively. And, the evolution rate of CRF07_BC was 7.2. In the other hand, the origin of CRF01_AE among IDUs was 2004.4 (2002.5-2006.1 95% HPD), 2003.5 (2002.5-2004.2 95% HPD), and the evolution rate was 7.3. According to the epidemiological investigation in this study, the earliest recorded case of CRF07_BC in central Taiwan was seroconversion at June, 2002.

Conclusions: This is the first molecular epidemiology study present the different evolution pattern of CRF07_BC and CRF01_AE among IDUs. Presenting author email: ycan@mail.mcu.edu.tw

WEPE0031

Emerging HIV-2 subtype F from the Northern province of Sierra Leone is linked to sooty mangabeys SIV in the region

R. Marx1, S. Smith2
1Tulane National Primate Research Center, Microbiology, Covington, United States, 2St. Michael’s Medical Center, Newark, United States

Background: Infection with human immunodeficiency virus type 2 (HIV-2) is endemic in West Africa. The virus originated from West African sooty mangabeys. Two forms are known: epidemic HIV-2 groups A and B and non-epidemic subtypes C-H. In 1993, infection with HIV-2 Group F was described in one person in Sierra Leone. Here we present evidence for HIV-2 subtype F as a potential emerging subtype directly linked to sooty mangabeys in the region.

Methods: A 68 year old male from Sierra Leone immigrating to New Jersey in 2007 was diagnosed with HIV antibodies during the immigration process. He was referred to St. Michael’s Hospital, Newark, NJ.

Results: Confirmation immunoblots were negative for HIV-1 and positive for HIV-2. Commercial PCR assay for HIV-2 proviral DNA was negative. Since patient was immune suppressed CD4 cell = 322, CD4/CD8 ratio 0.5, the negative virus load was suspect. The virus was aggressive in vitro, growing in PBMCs and CEM174 cells. Sequencing yielded a phylogenetic tree showing 2 sooty mangabey SIVs, both from the same town in the Northern Province, HIV-2 SL93F in 1993 and HIV-2NKW08 in 2008. This Sierra Leone cluster also contains 2 sooty mangabeys viruses, SIVSm5485 and SL92b.

Conclusions: Sooty mangabey derived viruses from northern Sierra Leone are ancestral to pathogenic HIV-2 in the same region. From its pathogenicity, virus is capable of person-to-person and persisting for almost 20 years in Sierra Leone. The importance of this HIV-2 subtype F is being assessed through a serosurvey of the region.

WEPE0032

Computationally predicted T-cell epitopes from HIV-1, SIV and HERV-KII Env, gag, pol proteins demonstrates epitope conservation along HLA alleles

M. Karu1, B. Paul2
1Kenya Bureau of Standards, Research and Development, Nairobi, Kenya, 2University of Nairobi, Human Anatomy, Nairobi, Kenya

Background: In this project gp 120, pol and gag proteins from HIV-1, SIV and HERV-KII were benchmarked for conserved T cell epitopes along 57 known human MHC alleles. Bioinformatics tools were used to search protein sequences and predict T cell epitopes with high affinity for human MHC. The aim was to explain the mechanisms responsible for poor protective immunity in seropositive individuals.

Methods: HIV-1, SIV and HERV-KII protein sequences were downloaded from the NCBI database in FASTA format and BLAST search was carried out to obtain best match. The sequences were benchmarked for T cell epitopes alongside MHC restriction. Artificial neural net (ann) method of prediction with IC 50 (nM) value of 5 was used to benchmark for immune epitopes.

Results: HLA A*0201, HLA A*0250 and HLA B*1517, picked similar epitopes with high affinity (IC 50(nM) less than 5) from both HIV-1, SIV and HERV-KII. The predicted epitopes had similar frequencies in all cases and shows conservation in the three studied proteins (gag, env and pol). High affinity T cell epitopes predicted based on MHC restrictions were equally found to be high affinity due to their low IC 50 (nM) values of less than 5. These epitopes are thought to confound the development of protective immunity against HIV-1 proteins because 1). They are similar with those of HERV-KII. 2. Have high affinity for MHC alleles thus produces a tolerance effect and 3). The frequency of occurrence of the epitopes from gag, env and pol proteins from HIV-1, SIV and HERV-KII does not differ significantly (p< 0.05).

Conclusions: Similar T cell epitopes with high binding affinities from HERV-KII and HIV-1/SIV can lead to immune escape along the response to the HLA alleles carried in an individual. Any vaccine based on these proteins should take into account these epitopes and seek to explore others which are not conserved.

WEPE0033

Dynamics of synonymous codons reveals reduced basal rate of long-term evolution of HIV-1

V. Müller1, S. Bonhoeffer2, R.J. De Boer3
1Edvards Luránd University, Institute of Biology, Budapest, Hungary, 2Federal Institute of Technology (ETH) Zürich, Institute of Integrative Biology, Zürich, Switzerland, 3Utrecht University, Theoretical Biology, Utrecht, Netherlands

Background: The dynamics of synonymous mutations is not affected by the strong selection pressures that act on protein structure, and can therefore be used to glean the basal rate of evolution of an organism. The evolutionary history of HIV-1 is characterized by recent bottlenecks, and the subsequent diversification of synonymous codons in each lineage provides clues on the long-term evolutionary dynamics of the virus.

Methods: We analyzed the diversification of synonymous codons over time in a large set (~50000) of public subtype B sequences with a registered date of sampling. We used mathematical and simulation models to predict the ex-
WEPE0034
A mathematical model for testing the viral load as a good prognosis for the HIV infection
G. Sánchez, S. Bautista, A. Valencia, A. Colchero, Y.N. Caro
Instituto Nacional de Salud Pública, CIEE, Cuernavaca, Mexico

Background: For clinical and economical research, it is crucial to establish a robust prognosis for HIV-depletion and the viral load because the viral load is considered a good illness evolution predictor. Right now the usefulness of this parameter as a predictor is being under inspection because some results have been considered not reliable enough. In this work we present a mathematical model for HIV progressions where we find that there is no an effective correlation between viral load and CD4 cell depletion.

Methods: We will use a mathematical model that has been previously validated by comparison with cohort studies data. In each simulated case, we will simulate the accumulation of mutations and then compare our model to each viral load and CD4 load measurements and our correlation will be observed six months and a year after the first measurements. Correlations will be taken between viral load and CD4 depletion.

Results: Our results mirrors the results of actual patient data, namely, that there was no correlation between viral load and CD4 count.

Conclusions: It is of main importance to have a reliable illness predictor because most of the clinical decisions depend highly on the patient prognosis. Recommendations based on economical evaluation will be affected as well because most economic models assume a purely linear relationship between CD4 depletion and viral load. Clearly, if the utility of viral load as a illness predictor is shown to be ineffective, new concepts and new research are to be made.

Presenting author email: victor.mueller@enp.eh.nh

WEPE0035
Genetic diversity and barriers to drug resistance of integrase among HIV-1 circulating in China
B. Chen
National Center for AIDS/STD Control and Prevention (NCAIDS) Chinese Center for Disease Control and Prevention (China-CDC), Division of Virology and Immunology, Beijing, China

Background: It has been more than two years since the first integrase (IN) inhibitor (INI), raltegravir was approved for the treatment of patients with multi-drug-resistant strains. Although this class of antiretroviral drugs has not been introduced, it is necessary to analyze the baseline genetic characteristics of integrase among HIV-1 subtypes circulating in China.

Methods: viral genome was abstracted from plasma samples of three major HIV-1 subtypes, B (123), CRF07_BC (68) and CRF01_AE (28). The whole reading frame of IN was amplified by nested RT-PCR, and sequenced. Natural polymorphism was determined by comparing with consensus sequences of HIV-1 DRB.

Results: The diversity of synonymous codons increased at a steady pace over time. The diversity of amino acids in the IN inhibitor (INI), raltegravir was approved for the treatment of patients with multi-drug-resistant strains. Although this class of antiretroviral drugs has not been introduced, it is necessary to analyze the baseline genetic characteristics of integrase among HIV-1 subtypes circulating in China.

Conclusions: The diversity of amino acids in the IN inhibitor (INI), raltegravir was approved for the treatment of patients with multi-drug-resistant strains. Although this class of antiretroviral drugs has not been introduced, it is necessary to analyze the baseline genetic characteristics of integrase among HIV-1 subtypes circulating in China.

Presenting author email: chenbin0557@163.com

WEPE0036
Development of a bioinformatic tool for analysis of HIV-1 drug resistance mutations
D.R. M. Cunha1, J.C. Couto-Fernandes2, T. Oliveira1, B. Galvão-Castro1, L.C. Alcantara1
1Fundação Oswaldo Cruz, Instituto Oswaldo Cruz, Rio de Janeiro, Brazil, 2South African National AIDS Council Secretariat Bioinformatics Institute, Cape Town, South Africa, Oswaldo Cruz Foundation – Gonçalo Moniz Research Center, Advanced Laboratory of Public Health, Salvador, Brazil

Background: Bioinformatic tools are useful in the analysis of the drug resistance mutations identified by genotyping HIV-1. However, each analytic tool uses different logistics, different interpretation and comparison of results. To streamline and systematize the analyses, we developed a bioinformatic tool for easy handling, allowing the identification of antiretroviral resistance mutations, in addition to possible post-translational glycosylation and phosphorylation sites in HIV-1 derived sequences.

Methods: We created a script to classify the HIV-1 pol sequences of different subtypes and recombinant forms using a local database on Mysql. We used the Phy (Phylogeny server) in order to generate a dendrogram and the CONTRAST software to analyze the results. The dendrogram was generated using the Neighbor-joining method, and the genetic distances between sequences were calculated using the p-distance method. The phylogenetic trees were edited, aligned and then analyzed for resistance-inducing mutations.

Results: The diversity of synonymous codons increased at a steady pace over time. The diversity of amino acids in the IN inhibitor (INI), raltegravir was approved for the treatment of patients with multi-drug-resistant strains. Although this class of antiretroviral drugs has not been introduced, it is necessary to analyze the baseline genetic characteristics of integrase among HIV-1 subtypes circulating in China.

Conclusions: The diversity of synonymous codons increased at a steady pace over time. The diversity of amino acids in the IN inhibitor (INI), raltegravir was approved for the treatment of patients with multi-drug-resistant strains. Although this class of antiretroviral drugs has not been introduced, it is necessary to analyze the baseline genetic characteristics of integrase among HIV-1 subtypes circulating in China.

Presenting author email: gilberto.sanchez@insp.mx

WEPE0037
An HIV drug resistance threshold survey in Ghana
W. Ampofo1, E. Bonney1, S.-A. Ohene2, V. Bekoe3, N.A. Addo1
1Noguchi Memorial Institute for Medical Research, Accra, Ghana, 2World Health Organisation, Ghana Office, Accra, Ghana, 3Ghana Health Service, National AIDS/STI Control Programme, Accra, Ghana

Background: A national antiretroviral treatment (ART) program is underway in Ghana. This study therefore sought to generate information on active transmission of HIV strains with HIV drug resistance (HIVDR) in recently infected individuals to help estimate HIVDR transmission levels in Ghana.

Methods: To determine the prevalence of transmitted HIVDR, sequential blood sampling of 60 ante-natal clients recently infected with HIV and without AIDS-defining illness was done with informed consent at 5 sites in Ghana. Plasma samples were confirmed as HIV-1 type 1 seropositive and viral load was also measured. An in-house genotypic assay utilizing nested polymerase chain reaction primers targeting protease and reverse transcriptase genes was done. This was followed by cycle sequencing. The HIVDR data was analyzed which was edited, aligned and then analyzed for resistance-inducing mutations in the University of Stanford Drug Resistance Database.

Results: The majority of the samples were classified as HIV-1 subtype CRF02_AG with a few CRF09_AEs, A, K and G. Most of the samples had HIV viral loads less than 10,000 HIV-1 RNA copies/ml, whilst a few had above 100,000 HIV-1 RNA copies/ml. Analyses of 47 consecutive samples for the presence of HIVDR mutations showed the following: 10 samples carrying one type of resistance (HIVDR mutations) in 4 samples and M81V/Y181C (major HIVDR mutations) in one sample.

Conclusions: With only one individual indicative of an HIVDR mutation of meaningful significance, the level of transmitted HIVDR in Ghana can be classified as low. The establishment of the HIV genotyping laboratory at the NMMR has enhanced the local capacity to conduct HIVDR studies in support of the national ART program of the Ghana Health Service.

Presenting author email: wampofo@noguchi.mimicom.org

WEPE0038
Low prevalence of genetic drug resistance mutations in a cohort of HIV infected patients entering antiretroviral therapy (ART) at two sites in Limpopo Province, South Africa
P. Besong1, J. Nwobegah
1University of Venda, Microbiology, Thohoyandou, South Africa

Background: Access to antiretroviral treatment is expanding in South Africa where treatment became available in the public health sector in 2004. Infection with drug resistant virus is a problem and threatens the effectiveness of current treatment. The aim of the present study was to determine the baseline genetic drug resistance profile in a cohort of patients entering an antiretroviral treatment programme in the Limpopo Province of South Africa where data on HIV drug resistance is limited.

Methods: In 2008 eighty blood samples were collected from patients about to enter the antiretroviral treatment programme ( stavudine/ lamivudine/nevirapine or efavirenz) at the Bela Bela HAPG Clinic and at the Pop HIV Clinic, Mankweng Hospital. Viral DNA was synthesised by reverse transcriptase PCR

Presenting author email: sbenstein557@163.com

Bioinformatic analysis in drug resistance
WEPE0035-WEPE0039

WEPE0038
Low prevalence of genetic drug resistance mutations in a cohort of HIV infected patients entering antiretroviral therapy (ART) at two sites in Limpopo Province, South Africa
P. Besong1, J. Nwobegah
1University of Venda, Microbiology, Thohoyandou, South Africa

Background: Access to antiretroviral treatment is expanding in South Africa where treatment became available in the public health sector in 2004. Infection with drug resistant virus is a problem and threatens the effectiveness of current treatment. The aim of the present study was to determine the baseline genetic drug resistance profile in a cohort of patients entering an antiretroviral treatment programme in the Limpopo Province of South Africa where data on HIV drug resistance is limited.

Methods: In 2008 eighty blood samples were collected from patients about to enter the antiretroviral treatment programme ( stavudine/ lamivudine/nevirapine or efavirenz) at the Bela Bela HAPG Clinic and at the Pop HIV Clinic, Mankweng Hospital. Viral DNA was synthesised by reverse transcriptase PCR

Presenting author email: sbenstein557@163.com

Bioinformatic analysis in drug resistance
WEPE0035-WEPE0039

WEPE0038
Low prevalence of genetic drug resistance mutations in a cohort of HIV infected patients entering antiretroviral therapy (ART) at two sites in Limpopo Province, South Africa
P. Besong1, J. Nwobegah
1University of Venda, Microbiology, Thohoyandou, South Africa

Background: Access to antiretroviral treatment is expanding in South Africa where treatment became available in the public health sector in 2004. Infection with drug resistant virus is a problem and threatens the effectiveness of current treatment. The aim of the present study was to determine the baseline genetic drug resistance profile in a cohort of patients entering an antiretroviral treatment programme in the Limpopo Province of South Africa where data on HIV drug resistance is limited.

Methods: In 2008 eighty blood samples were collected from patients about to enter the antiretroviral treatment programme ( stavudine/ lamivudine/nevirapine or efavirenz) at the Bela Bela HAPG Clinic and at the Pop HIV Clinic, Mankweng Hospital. Viral DNA was synthesised by reverse transcriptase PCR

Presenting author email: sbenstein557@163.com
and nested PCR targeting the pol gene. Population-based sequencing was performed for the protease and reverse transcriptase genes. Eighty reliably edited nucleotide sequences were examined for resistance associated mutations according to the Stanford Drug Resistance Interpretation Algorithm. Viral genotype was determined by phylogenetic analysis.

**Results:** Two (2.5%) major reverse transcriptase drug resistance mutations (K103N and M46L) were detected in 2 different subjects. Twenty three sequences (29%) harboured at least one minor mutation in the reverse transcriptase gene; while all (100%) had at least one minor mutation in the protease gene. Apart from an A/V recombinant (protease/reverse transcriptase) all the viruses were HIV-1 subtype C based on the protease and reverse transcriptase genes.

**Conclusions:** The results suggest that majority of the patients entering the treatment programmes will obtain therapeutic benefit from the stipulated regimen. In addition, the level of resistant viruses appears to be low at the population level in drug naive individuals at both treatment sites. However, regular monitoring of transmitted resistant viruses is important as access to treatment increases.

*Presenting author email: bessong@univen.ac.za*

**WEPE0039**

**Prediction of coreceptor usage from HIV-1 genotype and application to deep sequencing**

J.N. Dybowski, D. Heider, D. Hoffmann
University of Duisburg Essen, Department of Bioinformatics, Essen, Germany

**Background:** HIV-1 enters host cells by binding of virus envelope protein gp120 to cellular CD4 and one of coreceptors CCR5 and CXCR4. The tropism is mainly determined by the variable loop 3 (V3) of gp120 and viruses are categorized into R5, X4, and R5X4. The first bind to CCR5 and CXCR4 exclusively, the latter can bind to either one. The development of CCR5 antagonists has led to new therapeutic options, but requires knowledge about viral tropism. Computational prediction methods based on viral sequences are fast and inexpensive alternatives to cell-based assays.

**Methods:** We developed a two-level machine learning approach making independent predictions based on V3 electrostatics and hydrophobicity in the first level, respectively. Ultimately, in the second level, a consensus result based on the outcomes of the first level is made. The prediction method was used to study 454 deep sequencing data of V3 in four patients during vicriviroc treatment on a per-sequence level, determining coreceptor usage for every single sequence, and calculating the X4 fraction.

**Results:** Our method is robust against sequence length variations and different subtypes. The fully cross-validated prediction accuracy is around 95% with an AUC of 0.95. Using our method we were able to reproduce bulk tropism classification made for four patients based on deep sequencing data of the quasispecies. Our findings, made solely on predictions, were in strong agreement with tropism results. It can be seen that even patients with an R5 majority have a small set of X4 using viruses, which in some cases developed to the major population, causing therapy failure.

**Conclusions:** This method enables us to predict the tropism with very high accuracy according to tropism results and in four clinical cases based on studying V3 sequences evolution on a per-sequence resolution. Thus, it can be helpful in detection of X4 variants and support therapeutic decisions.

*Presenting author email: nikolaj.dybowski@uni-due.de*
WEPE0040

High prevalence of bone demineralization in a cohort of HIV-infected postmenopausal women

C.-C. Wang1, G. Gopalakrishnan2, E. Kocji3, S. Cu-Uvin4
1Brown Medical School/Miriam Hospital, Providence, United States, 2Brown Medical School, Providence, United States

Background: Even as more HIV-infected women are living longer with HAART, there is little data on bone metabolism in HIV-infected postmenopausal women.

Methods: HIV-infected women age ≥ 45 were referred to HIV Menopause Clinic at Miriam Hospital (Providence, RI). A woman was considered postmenopausal if she was status-post bilateral salpingo-oophorectomy with or without hysterectomy, or if she had no menses for more than 1 year with elevated FSH and/or LH. History and blood work were collected: Bone mineral density (BMD) was assessed by dual-energy X-ray absorptiometry (DEXA) in lumbar spine and hip. We then calculated 10-year fracture risk using FRAX, which was developed by WHO integrating clinical risk factors and femoral neck BMD.

Results: 35 women were included in this analysis. Median age was 52 years; 40% Caucasian, 34% African-American, 26% Latino. Median weight was 151 lb (69 kg) and BMI was 26 (23-34). Median percent bone density of HIV diagnosis since the year of HIV diagnosis was 66.7%. Median CD4 count was 373 cells/μL. 86% were on NRTI-based HAART; 40% with tenofovir, 28% with NNRTI, and 43% with PI. 63% of subjects had undetectable plasma viral loads (PVL) (< 75 copies/mL). 40% were current tobacco-smokers, and 4% were on antidepressants, respectively; p=0.02. Depressive disorders (scores≥7) and manifest depression (scores≥11) in the respective groups (44%, 40%, 52%; p=0.02), in the subgroup of patients aged ≥50 years. The Hospital Anxiety and Depression Scale (HADS, self-rated) was used to assess depressive disorders. Lack of stable partnerships (OR=1.5, 95% CI 1.1-2.1), unemployment (OR=2.4, 95% CI 1.6-3.5) and age ≥ 60 years (OR=2.7, 95% CI 1.8-3.9) were associated with presence of depressive disorders. Mediated depression did not differ between the groups (12%, 10% and 8%; p=n.s.).

Conclusions: In this study, patients aged ≥50 years with either HIV infection, diabetes mellitus or without chronic disease, depressive disorders were present in 33%, 30% and 21%, respectively. Not the underlying disease like HIV or Diabetes mellitus, but socio-economic factors and patient partnership and employment were significantly associated with depressive disorders.

Presenting author email: info@microresearch.de

WEPE0043

Excess cardiovascular risk in HIV+ patients aged over 50 – results from the German 50/2010 cohort study in aging populations of HIV+ and HIV- patients

E. Wolf1, A. Balogh1, C. Koepl1, R. Baumann1, R. Denger1, S. Schoelzel1, T. Wunsch1, C. Schuler1, F. Mostafá1, G. Friesel1, H. Jaeger1-5, and the 50/2010 Study Group
1MUC Research GmbH, Munich, Germany, 2Practice Dr Baumann, Neuss, Germany, 3Practice Dr Denger/Sammler, Friedrichsheim, Germany, 4Allgemeinmedizin Troisdorf, Troisdorf, Germany, 5Practice Dr Thomas Wunsche, Berlin, Germany, 6Private Practice for Hematology, Oncology and Infectious Diseases, Karlsruhe, Germany, 7Private Practice for Hematology, Oncology and Infectious Diseases, Karlsruhe, Karlsruhe, Germany, 8MVZ Karlplatz-HIV Research and Clinical Care Centre, Munich, Germany, 9DAGNAE e.V., Berlin, Germany

Background: Studies evaluating excess risk for co-morbidities in aging HIV patients in comparison to HIV-negative patient groups are missing. We assessed cardiovascular risk factors in a cohort including 3 patient groups aged ≥50: HIV+ patients, HIV-negative patients with diabetes mellitus II (DM), and control patients without severe chronic or malignant disease.

Methods: Cohort study in HIV+, DM, and control patients aged ≥50 investigating the presence of cardiovascular risk factors. We calculated the 10-year risk for coronary heart disease (CVD, i.e. myocardial infarction and coronary death) using the Framingham risk equation. 10-year risk ≥20% or history of CVD was defined as high risk.

Results: Analysis is based on 202 HIV+, 195 DM, and 164 control patients.

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>HIV+ aged ≥50 (n=202)</th>
<th>HIV- with DM (n=195)</th>
<th>HIV- negative DM (n=164)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age (y) (IQR)</td>
<td>58 (53-63)</td>
<td>60 (57-70)</td>
<td>58 (54-64)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>HDL (mg/dl)</td>
<td>46 (39-54)</td>
<td>54 (46-64)</td>
<td>49 (40-56)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>LDL≥160 mg/dl</td>
<td>22%</td>
<td>13%</td>
<td>26%</td>
<td>0.008</td>
</tr>
<tr>
<td>HDL (mg/dl)</td>
<td>46 (39-54)</td>
<td>54 (46-64)</td>
<td>49 (40-56)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Triglycerides ≥200 mg/dl</td>
<td>36%</td>
<td>33%</td>
<td>28%</td>
<td>n.s.</td>
</tr>
<tr>
<td>CVD</td>
<td>20%</td>
<td>43%</td>
<td>20%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Smokers</td>
<td>30%</td>
<td>22%</td>
<td>28%</td>
<td>n.s.</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td>12%</td>
<td>100%</td>
<td>0%</td>
<td>n.s.</td>
</tr>
<tr>
<td>History of CVD</td>
<td>21%</td>
<td>26%</td>
<td>14%</td>
<td>0.018</td>
</tr>
</tbody>
</table>

[Risk factors]
WEPE0044
Is sexual dysfunction associated with HIV infection or age? Results from the German 50/2010 cohort study in aging populations of HIV+ and HIV− patients


Methods: A cross-sectional, observational national cohort study in HIV+, DM-, and control patients aged ≥50 years. The cohort comprises 2,078 individuals. Differences in sexual dysfunction between groups were assessed by bivariate analysis with age and stable partnership as covariates. Results: The prevalence of sexual dysfunction (score≥8; (p<0.01). Changes of antiretroviral treatment (ART) regimes were more frequent in the older group (p<0.01). When comparing ethnic groups in our cohort, older patients were more often diagnosed with Caucasians (17% vs. 4% in other groups, p<0.001). No significant difference for TDR was found. The proportion of older patients with CDC stage A was significantly lower than with stages B or C (10% vs 21% vs 21%, p<0.001). Changes of antiretroviral treatment (ART) regimes were more frequent in elder patients (p<0.01). The median CD4 count at start of treatment was lower in the elder (176/µl vs 206/µl, p=0.017). After 72 weeks of ART, the relative increase of CD4 cells was significantly lower in elder as compared to younger patients (206/µl vs 231/µl, p=0.017).

Conclusions: In our cohort, immune reconstitution under ART was more severely compromised in elder patients as compared to younger patients. Elder patients started ART at more advanced CDC stages than younger patients and underwent changes of ART more frequently. Thus, due to several unfavorable characteristics identified, normalization of treatment strategies is very important in the elder HIV population.

Presenting author email: Stefan.reuter@med.uni-duesseldorf.de

WEPE0045
Effect of progressive resistance training on strength evolution of elderly living with HIV as compared to matched controls

P.M.L. Souza, W. Jacob-Filho, J.M. Santarem, A.A. Zomignan, N.R. Batistini

The University of São Paulo, Pathology, São Paulo, Brazil, The University of São Paulo, Medicine, São Paulo, Brazil

Background: Elderly people present significant muscular strength decrease, compromising the quality of life. Chronic infections, such as HIV/AIDS, worsen this situation because they potentiate the effects of aging. This study compares the effects of one year of progressive resistance training on muscular strength, physical fitness and body composition of older adults living with or not with HIV.

Methods: Eleven adults living with HIV, ≥ 60 years old and without regular physical activity plus 21 controls, matched for age, sex and baseline physical activity, were prospectively followed for one year. Primary exercises for major muscular groups were included in the training program consisting of 3 sets of 12-18 repetitions, at light, moderate and heavy loads, performed 2 times/week during 1 year, under professional supervision. Strength increase was evaluated bimonthly while body composition and physical fitness were evaluated before and after the one-year training.

Results: Those living with HIV were younger, had smaller BMI and were weaker; however, all those muscular groups related to the keeping of orthostatic position. However, there were significant strength increases for all muscular groups, with the average loads supported increasing from 1.52 to 2.33 times the baseline values for those living with HIV in contrast with an increase ranging from 1.21 to only 1.48 times the baseline values in controls (p<0.001). In addition, among those living with HIV the muscular strength increased linearly along the training, while presenting a saturation pattern for controls. Therefore, resistance training safely increased the strength of older adults living with HIV, nullifying the differences initially seen when compared to healthy controls. These findings favor the recommendation of resistance training programs for older adults living with HIV.

Presenting author email: plsouza@usp.br

WEPE0046
Comparison between elder and younger treatment-naive HIV-positive patients in Germany

S. Reuter1, M. Oettel2, K. Kaiser3, E. Schüttler5, T. Lengauger4, G. Fätkenheuer4, J. Rockstroh1, M. Knodten1, D. Häussinger7, RESINA Study Group

1University Hospital Düsseldorf, Clinic for Geriatrics and Gerontology, 2Nephrology and Infectious Diseases, Düsseldorf, Germany, 3AugustinernerInnen Hospital, Internal Medicine, Cologne, Cologne, Germany, 4University of Cologne, Institute of Virology, Cologne, Germany, 5Max Planck Institute for Informatics, Computational Biology and Applied Algorithmics, Saarbrücken, Germany, 7University Hospital Bonn, HIV Outpatient Department, Bonn, Germany, 8Private Practice for Internal Medicine and HIV, Aachen, Germany

Background: Elder patients are a growing population in developed countries. In order to provide optimal care for elder HIV-positive patients, it is important to gain insight into the specific features of transmission, epidemiology, immunology and antiretroviral treatment of this group.

Methods: Since 2001, RESINA is an ongoing study analyzing the epidemiology and outcomes of transmitted drug resistant HIV positive patients. The cohort currently comprises 2,078 patients from Northern-Czech Republic. For statistical evaluation, we used chi-square and Mann-Whitney-U-Tests. Elder people were aged 50 years and older.

Results: Among elder patients, we found a higher proportion of men as compared to women (p<0.001). The proportion of elderly patients was significantly higher in the heterosexual group (30%), as compared to bisexual (20%), homosexual (13%) and IVDU (4%) modes of transmission (p<0.001). When comparing ethnic groups in our cohort, elderly patients were most often of Caucasian (17%) vs. 4% in other groups, p<0.001. No significant difference for TDR was found. The proportion of older patients with CDC stage A was significantly lower than with stages B or C (10% vs 21% vs 21%, p<0.001). Changes of antiretroviral treatment (ART) regimes were more frequent in elder patients (p<0.01). The median CD4 count at start of treatment was lower in the elder (176/µl vs 206/µl, p=0.017). After 72 weeks of ART, the relative increase of CD4 cells was significantly lower in elder as compared to younger patients (206/µl vs 231/µl, p=0.017).

Conclusions: In our cohort, immune reconstitution under ART was more severely compromised in elder patients as compared to younger patients. Elder patients started ART at more advanced CDC stages than younger patients and underwent changes of ART more frequently. Thus, due to several unfavorable characteristics identified, normalization of treatment strategies is very important in the elder HIV population.

Presenting author email: info@mucresearch.de

WEPE0047
HIV in older adults in rural South Africa: high early mortality on antiretroviral therapy despite less advanced disease at initiation

P.C. Mutevedzi1, R.J. Lessells1, M.-L. Newell2,3

1Africa Centre for Health and Population Studies, Mtubatuba, South Africa, 2Institute of Child Health, University College London, London, United Kingdom

Background: Elderly age has been associated with increased mortality on antiretroviral therapy in an HIV-infected population in developed countries. Whether this relationship also exists in Africa, and which factors might influence mortality in older adults have not been well described. We compared mortality on ART between younger (<50yrs) and older (≥50yrs) adults in a rural South African cohort.

Methods: Adults (≥16yrs) initiated on ART Oct 2004 - Sept 2009. Data censored at death, loss to programme, or ≥3 Feb 2010. Analyses stratified by age at ART initiation (<50yrs; ≥50yrs). Proportion and median tests to compare baseline characteristics; Kaplan-Meier and Cox proportional hazard regression to assess mortality and associated risk factors for each age.

Results: 8498 adults; 882 (10.4%) ≥50yrs. Compared to <50yrs, ≥50yrs had: higher proportion males (42.9% vs 32.7%, p<0.001); higher baseline CD4 count (median 127 vs171cells/mm³; p=0.016); lower proportion on TB treatment (18.0% vs 22.3%; p=0.027) and higher proportion creatinine >120µmol/L (11.7% vs 5.5%, p<0.001). 917 people died within 13133 person years. Mortality profiles are shown in Table. In older adults, mortality was significantly associated with male sex (aHR 1.39/95% CI 1.21-1.62) and HIV stage 3 or 4 (aHR 3.00 95% CI 1.73-5.17), and creatinine>120µmol/L (aHR 1.94/95% CI 1.13-3.08). Lower baseline CD4 count increased mortality risk in younger but not older adults.

Conclusions: Early mortality in older adults is higher than younger adults, despite less advanced disease at ART initiation. Further work is required to determine whether this mortality is driven by poorer immune recovery or other factors (co-morbidities, drug toxicity).

Presenting author email: pmutevedzi@africacentre.ac.za
**WEPE0048**

**Increased risk of short-term mortality among HIV-infected adults aged 50 years and over presenting late**

B. Smith, V. Delpech, A. Brown, B. Rice
Health Protection Agency, Microbiology and Epidemiology of STIs and HIV, London, United Kingdom

**Background:** With evidence of increasing numbers of older adults (aged 50 years and over) in England, Wales and Northern Ireland (E,W&NI) being diagnosed with HIV, and evidence of faster disease progression among those diagnosed at an older age, we present national rates of late diagnosis and death among older adults and compare these with those diagnosed aged 15-49.

**Methods:** Data comprised adults aged 15 years and over newly diagnosed with HIV between 2000 and 2007 in E,W&NE. Those with a CD4 cell count < 200 within 3 months of diagnosis were defined as late presenters.

**Results:** Almost half (48%) of older adults were late presenters versus a third (33%) of adults aged 15-49 (<p=0.001). Amongst MSM the respective figures were 49% versus 23% (<p=0.05), 53% versus 45% (<p=0.012), and amongst heterosexual women 51% versus 36% (<p=0.001). Whilst late presenters aged 50 years and over represented 4% of all new diagnoses in 2007, they contributed to an estimated 30% of AIDS-related deaths in all individuals diagnosed in 2007.

**Conclusions:** As compared to younger adults diagnosed with HIV, our study provides evidence of elevated rates of late diagnoses among older adults (particular amongst MSM), and an increased risk of short-term mortality. These findings highlight the need for testing strategies to encourage HIV testing amongst older MSM at risk of HIV. Further analyses are required to inform targeted HIV testing strategies among older heterosexuals.

Presenting author email: ruth.smith@pha.org.uk

**WEPE0049**

**Pharmacotherapeutics of HIV/AIDS in the elderly living with diabetes: emphasis on drug-drug interactions**

T.S. Ogubkwiri, C. Ruiz, R. Clark, L. Beshch, J. Dargie, T. Mericke
1HIV Outpatient Program/Xavier University, Section of Infectious Diseases-HIV/AIDS, New Orleans, LA, United States, 2Louisiana State University Health Science Center, Health Outpatient Program, Section of Infectious Diseases, New Orleans, United States

**Background:** Whereas the treatment of HIV/AIDS with combined antiretroviral therapy has significantly altered the natural history of this life-threatening disorder, this highly active antiretroviral therapy (HAART) has been achieved at a great cost: being associated with a broad range of metabolic complications with HAART by itself (diabetes, increased lipids, glucose intolerance, dyslipidemias and changes in body fat composition).

**Methods:** A Genetic Screening Program was times more likely to die within a year of diagnosis than older adults who were not diagnosed late (14% vs. 1%, <p=0.001), and three times more likely to late presenters aged 15-49 (4.3%, <p=0.001). Whilst late presenters aged 50 years and over represented 4% of all new diagnoses in 2007, they contributed to an estimated 30% of AIDS-related deaths in all individuals diagnosed in 2007.

**Conclusions:** As compared to younger adults diagnosed with HIV, our study provides evidence of elevated rates of late diagnoses among older adults (particular amongst MSM), and an increased risk of short-term mortality. These findings highlight the need for testing strategies to encourage HIV testing amongst older MSM at risk of HIV. Further analyses are required to inform targeted HIV testing strategies among older heterosexuals.

Presenting author email: ruth.smith@pha.org.uk

**WEPE0050**

**Clinical and epidemiological record of HIV-infected patients over 50 years old in the infectious disease unit of a Greek hospital**

D. Tsachouri1, S. Metallidis2, P. Kollaras1, D. Pilslatzis3, L. Skoura2, P. Cain, M. Balamane, P. Lovelace, Y. Rosenberg-Hasson, A. Zolopa
1HIV Outpatient Program/Xavier University, Section of Infectious Diseases-HIV/AIDS, New Orleans, LA, United States, 2St Luke’s Roosevelt Hospital, New York, United States

**Background:** In recent years, the epidemiology of HIV infection seems to characterize the health of elderly individuals centered with the diagnosis. Aim of the present study was to record and analyze the clinical and epidemiological characteristics of a series of HIV seropositive adults aged over 50 at the time of the diagnosis.

**Methods:** Patients who attended the infectious diseases unit of our hospital during 1998-2009, were recorded.

**Results:** Of total, 87 (82%) of the patients were males and 19 (17.9%) were females. Mean age by the time of diagnosis was 56.5 years and in 95 (89.6%) patients, sexual contact was the mode of transmission (homosexual-69 patients, 72.6%) heterosexual-26 patients, 27.3%). The median baseline CD4 cell count was 270 cells/uL, respectively, and virologic suppression for a median of 3.6 years were enrolled. Clinical characteristics were similar between the younger and older subjects, other than lower median CD4+ T-cell counts in the older subjects (923 vs. 772 cells/uL, <p=0.02), Proportions of activated (CD69 + DR+) CD4+ and CD8+ T cells were high (16% and 21%, respectively) but did not differ between the older and younger subjects. Older subjects had significantly fewer naive (CD45RA+CD27+) CD4+ T cells (13% vs. 24%, <p=0.02) but also significantly more CD4+ and CD8+ central memory (CD45RO+CD27+) cells (71% vs. 57%, <p=0.01, and 43% vs. 31%, <p=0.05, respectively). Proportions of CD4+ and CD8+ CD28- T cells were similar between the two groups. While levels of some pro-inflammatory cytokines and markers of endothelial dysfunction such as RANTES, ICAM-1, VCAM-1 and P-selectin were increased in older patients and markers of endothelial dysfunction such as RANTES, ICAM-1, VCAM-1, and P-selectin were increased in older patients, there was no clear age-associated increase in the majority of cytokines evaluated.

**Non-AIDS related co-morbidities (e.g. diabetes, hypertension etc.)**

**WEPE0052**

**Review of HIV-infected patients that presented with H1N1 influenza disease in two urban clinics in New York**

E. Gonzalez1, G. Pseludos Jr2, L. Tzevadas-Hali3, J. Fefer2, J. Paredes2, V. Sharp1
1St. Lukes-Roosevelt, Center for Comprehensive Care, New York, United States, 2St Luke’s Roosevelt Hospital, New York, United States

**Background:** HIV infection A is now recognized as a global pandemic. The incidence and treatment experience of H1N1 patients at a major primary care center was reviewed during the initial phase of this pandemic.

**Methods:** A retrospective chart review of 2951 HIV-infected adult (> 18 years old) patients was performed from 5/1/09 to 12/31/09 at the Center for Comprehensive Care, St. Luke’s-Roosevelt Medical Center. Patients presenting with flu like symptoms and were tested for Influenza by nasopharyngeal rapid antigen test and by culture. Results were 24 (0.8%) positive. Demographic data, laboratory data, clinical data and documented treatment outcomes were analyzed.

**Results:** The incidence of H1N1 influenza in our clinics was 24/2951, 0.8%.
WEPE0055

Pericardial effusion of HIV-infected patients

S. Esser1, N. Brockmeyer2, K. Neuhaus3, B. Maisch4, T. Neumann1, on behalf of the Competence Network of Heart Failure and the Competence Network of HIV/AIDS
1University Hospital Essen, Clinic of Dermatology and Venerology, Essen, Germany, 2University Hospital, Clinic of Dermatology, Bochum, Germany, 3University Hospital Essen, Clinic of Cardiology, Essen, Germany, 4University of Marburg, Clinic of Cardiology, Marburg, Germany

Background: Patients with human immunodeficiency virus (HIV) infection have an increased risk of cardiovascular diseases. Previous publications described pericardial effusion as one of the most common HIV-associated cardiac afflications. The aim of the current study was to investigate if pericardial effusion has still a relevant meaning of HIV-infected patients even in the era of antiretroviral therapy.

Methods: The HIV-HEART (HIV-infection and HEART disease) study is a cardiology driven, prospective and multicenter cohort study. Outpatients with a known HIV-infection were included over a 20 month recruiting period. The study comprehends classic parameters of HIV-infection, comprising CD4-cell count and HIV viral load, as well as non-invasive tests of cardiac diseases, including a thorough transthoracic echocardiography.

Results: 802 HIV-infected patients (female: 16.6%) with a mean age of 44.2 ± 10.3 years were included. Duration of HIV-infection since initial diagnosis was 7.6 ± 5.8 years. Of all participants, 85.2% received antiretroviral therapy. Virus load was detectable in 34.4% and CD4 - cell count was in 12.4% less than 200 cells / µl. Pericardial effusions were present in only two of the analysed population. None of the participants had signs of a relevant cardiovascular impairment by pericardial effusion.

Conclusions: Our results demonstrate that the era of antiretroviral therapy goes along with low rates of pericardial effusions in HIV-infected Outpatients. Our findings are in contrast to the results of publications, performed before the common use of antiretroviral therapy.

Presenting author email: stefan.esser@uk-essen.de

WEPE0056

Risk factors for obstructive lung disease (OLD) in a city HIV clinic patient of predominantly HIV-infected patients

S. Ramsahai1, B. Mastoor2, P. Ramireddy3, M. Daftary4, F. Farhadi4, M. Daniel5, N. Warner4
1Howard University, Infectious Disease, Washington, United States, 2Howard University, Internal Medicine, Washington, United States, 3Howard University, School of Pharmacy - Center for Minority Health Services Research, Washington, United States, 4Howard University, Washington, United States

Background: In early stages of HIV disease, the intense infiltration of CD8+ T cells in the lung has been described as an explanation for the increased susceptibility of HIV-infected patients for Chronic Obstructive Pulmonary Disease (COPD). CD8 + T cells are critical for COPD development. This study will describe the prevalence of Obstructive Lung Disease (OLD) and risk factors in an inner city clinic.

Methods: A retrospective chart review was conducted of HIV-infected patients seen in a clinic in Washington DC from May 2003 to November 2009. Patients were defined as OLD if they had chart documented ECG-diagnosis or patient self-report of COPD, asthma, bronchitis, emphysema, chronic obstructive pulmonary disease, bronchodilator or steroid inhaler use. Univariate and multivariate analyses of subjects were done to determine the association of OLD in HIV-infected patients with demographics, antiretroviral therapy, cigarette use, inhaled and intravenous drug use (IVDU), CD 4 Count and pneumonia history.

Results: Of 332 HIV-infected African-American patients, 53 (16%) met criteria for OLD. Of patients with OLD, 28 (53%) were women, mean age was 47 years and mean CD4 Cell Count was 408 cells/µl. The mean duration of HIV was 7 years and 46 patients (87%) were on antiretroviral therapy. Thirty-eight patients (72%) were cigarette smokers, 7 patients (13%) were IVDU, and 18 patients (35%) were inhaled drug users. OLD was directly associated with smoking history in HIV-infected patients (adjusted odds ratio, 2.47; 95% confidence interval, 1.23 to 4.96; p < 0.05). No significant association was found between antiretroviral therapy, inhaled and intravenous drug use, duration of HIV, CD 4 Count, pneumonia, or gender and OLD.

Conclusions: Smoking remains a major contributing factor for OLD in HIV-infected patients regardless of their CD4 Count and duration of HIV. Further investigation into the pathogenesis of OLD in HIV-infected patients is needed.
Background: Previous studies suggest besides conventional risk factors (obesity, cigarette smoking and diabetes mellitus) for cardiovascular disease, HIV itself is a risk factor for atherosclerosis. This study aims to describe atherosclerotic lesions in an autopsy series of HIV-infected patients and examine the influence of cardiovascular risk factors on the development of atherosclerosis.

Methods: We retrospectively studied cardiovascular autopsy findings from 75 patients with HIV who died from 1985 to 2000. Demographics, co-morbidities and histological findings of coronary vessels were evaluated in patients’ clinical record and analyzed.

Results: Out of 57 patients with none to mild coronary artery disease (CAD), 33 (58%) patients had no CAD and 24 (42%) patients had mild CAD. The median age was 35 years (range 20-53) with 47 (83%) males and 10 (17%) females. Out of 18 patients with moderate to severe CAD, 5 (28%) had severe disease and 13 (73%) had moderate disease. The median age was 44 years (range 33-58) with 15 (83%) males and 3 (17%) females. Out of patients with moderate to severe disease, 7 (39%) had no risk factors, 7 (39%) had one risk factor, 3 (17%) had two risk factors and 1 (6%) had three risk factors. Out of these patients with moderate to severe disease, 13 (73%) had left anterior descending artery involvement, 8 (44%) had right coronary artery involvement and 4 (22%) had left main artery involvement and 6 (33%) had circumflex artery involvement.

Conclusion: Out of 18 patients with moderate to severe CAD, 39% had no risk factors, suggesting HIV was the main risk factor for cardiovascular disease. Even though 39% still had risk factors, they still had moderate to severe disease. More prospective studies are needed to further define HIV as a risk factor for the development of atherosclerosis.

WEPE0058
Antiretroviral treatment reverses HIV-associated anemia in rural Tanzania

A. Johannesen1, E. Naman2, S. Gundersen1,3, J. Bruni1,4
1Oslo University Hospital, Department of Infectious Diseases, Ulleval, Oslo, Norway
2Department of Obstetrics and Gynaecology, National Hospital of Harare, Harare, Zimbabwe
3Sorlandet Hospital HF, Research Unit, Kristiansand, Norway
4University of Agder, Centre for Development Studies, Kristiansand, Norway

Background: HIV-associated anemia (HAA) is common and associated with poor prognosis, but its etiology in rural Africa is poorly described. We aimed to characterize HAA in HIV-infected patients in rural Tanzania, and to assess the effect of antiretroviral treatment (ART) on hemoglobin level.

Methods: One-hundred-sixty-seven adults (≥15 years) who started ART at Haydom Lutheran Hospital between October 2003 and June 2007 were included in the study. A combination of abacavir or zidovudine with lamivudine and either nevirapine or efavirenz was the standard regimen. Hemoglobin, mean corpuscular volume (MCV) and mean corpuscular hemoglobin (MCH) were measured at baseline. Anemia was defined as a hemoglobin level of < 12 g/dL for women and < 13 g/dL for men. Paired samples T-tests were used to compare hemoglobin level before and one year after ART initiation.

Results: At baseline, mean hemoglobin was 10.7 g/dL (SD 2.0), and 126 patients (76%) had anemia. After one year, the mean hemoglobin had increased by 1.9 g/dL (p < 0.001); however, 52 patients (31.1%) still met the definition of anemia, of whom 20 were on a zidovudine-containing regimen.

Conclusions: Three quarters of the patients who started ART in rural Tanzania were anemic, but ART significantly improved the hemoglobin level in the majority of patients. Nonetheless, after receiving ART for one year, one third of the patients were still anemic, suggesting that other interventions to treat HIV-associated anemia in rural Africa might be warranted.

WEPE0059
Carotid intima-media thickness in HIV-positive Polish patients

W. Kwiatkowski1, M. Czeirzecki1, B. Krzyz1, J. Gasiorowski1, M. Bubala2, J. Kwiatkowski1, W. Witkowski1, A. Glady2
1Regional Specialist Hospital in Wroclaw, Research and Development Centre, Dept of Angiology, Wroclaw, Poland
2Wroclaw Medical University, Department of Infectious Diseases, Wroclaw, Poland

Background: The aim of the study was to evaluate the independent risk factors for coronary artery stenosis in HIV-positive patients in Polish population which is among European countries group with high risk for CAD.

Methods: We assessed risk factors for atherosclerosis in HIV-positive patients in Poland population which is among European countries group with high risk for CAD.

Results: Using the CIMT (carotid intima-media thickness) measurement in HIV-positive patients, we observed a significant increase in the intima-media thickness in HIV-positive group compared with HIV-negative group. The increase was significant for all cardiovascular risk factors.

Conclusion: HIV-positive patients more extensive atherosclerosis measured by CIMT was observed. Classical risk factors of CVD should be examined, but also HIV infection and antiretroviral therapy are important predictive factors of premature atherosclerosis. Further longitudinal studies are necessary to establish significance of increased CIMT in the development of serious atherosclerotic diseases in HIV-positive population.

WEPE0060
High prevalence of hearing loss and ear disease in HIV-infected Peruvian children

C.K. Chao1,2, A.H. Messer3, I.A. Czochwicz2, L. Kolevic2, M. Larragan4, J. Albarracin5, S. Montano6, J.R. Zunt2
1Fogarty International Training Program, Bethesda, United States
2University of Washington, Seattle, United States
3Stanford University School of Medicine, Stanford, United States
4Hospital Arzobispo Loayza and Instituto Nacional de Salud del Niño, Lima, Peru
5University Nacional Mayor de San Marcos, Lima, Peru
6Naval Medical Research Center Detachment, Lima, Peru

Background: HIV infection has been associated with hearing loss in adults and children, but risk factors and etiologies are not well defined. The objective of this study was to determine the prevalence of and risk factors for hearing loss and other ear diseases in HIV-infected children in Peru.

Methods: Cross-sectional study of HIV-infected children ages 4 through 17 receiving care at two public hospitals in Lima, Peru: Hospital Posadas and Hospital Arzobispo Loayza and Instituto Nacional de Salud del Niño. Study examination included pure-tone audiometry, tympanometry and otoscopy. Historical and socioeconomic information was obtained through parental survey and chart review. Data were entered into a REDCap database.

Results: One hundred HIV-infected Peruvian children were examined. Average age was 9.5 years; 53 (53%) were female; 86 (86%) were receiving HAART therapy (average duration 4.2 years). Hearing loss was identified through abnormal audiometry in 35 (35%) children: 30 (30%) had conductive hearing loss; 1 (1%) had sensorineural loss; and 4 (4%) had mixed conductive and sensorineural loss. Tympanic membrane (TM) pathology was seen on tympanometry in 56 (56%) children and 10 (10%) children had TM perforations. Abnormal tympanometry was correlated with history of pneumonia (p = 0.004) and three or more ear infections in the past year (p = 0.029), but not with CD4 count or HAART therapy.

Conclusions: This is the largest assessment of ear disease in HIV-infected children to date. We found a high prevalence of conductive and mixed hearing loss, abnormal tympanometry and TM perforations - significantly higher than rates reported in HIV-uninfected children and elsewhere. The mechanism of HIV-associated hearing impairment is not clearly defined, but the association with recurrent ear infections highlights the importance of screening HIV-infected children for ear infections and treating infections appropriately when detected.

WEPE0061
Prevalence and risk factors associated with renal dysfunction in HIV-positive individuals on HAART

A. Menezes, J. Torelly, E. Spring
Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul, Porto Alegre, Brazil

Background: Renal impairment is increasingly reported in individuals on antiretroviral therapy (ART). Our objective is to determine the prevalence and associated risk factors of renal dysfunction in a cohort of HIV-positive individuals with undetectable HIV viral load on ART.

Methods: Individuals within 18 and 72 years old, on ART greater than 1 year, with undetectable viral load (< 50 copies/ml) and CD4 count ≥ 200 cells/mm³, are being enrolled at the outpatient HIV/AIDS clinic at Hospital de Clínicas de Porto Alegre. Exclusion criteria were data on the renal function and other comorbidities were not available.

Results: 196 patients (52% women) had the data analyzed so far. Average age of 45 (22-72) years old. Renal function was normal in 62% (n=122); mild impairment in 29% (n=57); moderate in 8% (n=16); and, severe in 0.5% (n=1).

Conclusions: No specific cause for renal dysfunction was identified. The most common cause for renal impairment was hypertension, followed by diabetes mellitus.

Presenting author email: ckchoa@stanford.edu
Hypertension and hyperglycemia in an ARV naïve HIV-positive population in Dar es Salaam, Tanzania

E. Liu6, J. Okuma5, G. Chalamilla2, S. Kaaya7, W. Fawzi6

Background: Changes in blood pressure and blood glucose levels have been reported in patients treated with HAART in developed countries, but data from developing countries are still scarce.

Methods: This cross-sectional analysis of blood pressure and glucose levels was conducted among non-pregnant ART-naïve patients enrolled between 2004-2008 in the Harvard PEPFAR funded HIV Care and Treatment program in Dar es Salaam, Tanzania. Hypertension was defined as systolic blood pressure (SBP) ≥ 140 mm Hg or diastolic blood pressure (DBP) ≥ 80 mm Hg; diabetes was defined as random blood glucose (RBG) ≥ 200 mg/dl, and hyperglycemia as RBG ≥ 180 mg/dL. Relative risk regression models were used to examine the predictors of hypertension, diabetes and hyperglycemia.

Results: Prior to ART initiation 15,146 non-pregnant, ARV naïve patients (67% women, median age 35(30-42) years; CD4 count 259 (181-428) cells/mm³) had blood pressure and glucose measured. The prevalence of hypertension was 9.2%; hyperglycemia 3.0%; DM 1.2%. The prevalence of hypertension was 13% higher among men (95% CI 3%-23%) and two-fold higher among patients age ≥ 50 compared to patients <50 (p-value trend < 0.01). After adjusting for age, sex, BMI, CD4 and WHO stage, hypertension was 61% lower in patients with ≥ 200 cells/mm³ compared to those with <200 cells/mm³ (p-value trend < 0.01). Likewise, hyperglycemia was 51% lower among patients with WHO stage IV disease, compared to those with stage I disease (p-value < 0.05). The prevalence of hyperglycemia increased significantly with age, BMI, and WHO stage, and decreased with increasing CD4 count.

Conclusions: Patients with the greatest degree of immune dysfunction had lower blood pressure and diabetic BP, but higher random blood glucose levels. Further study is required to confirm these discrepant findings and assess the impact of HAART on these parameters.

Dyslipidemia in an ARV naïve HIV-positive population in Tanzania

C. Armstrong1, E. Liu2, J. Okuma2, C. Hawkins3, D. Spiegelman,

Background: Cholesterol abnormalities have been reported among antiretroviral treatment (ART) naïve and experienced HIV-infected patients in developed countries. Data from developing countries however, is limited.

Methods: A cross sectional analysis of the prevalence and predictors of dyslipidemia (defined as either total cholesterol (TC) ≥200mg/dL, low-density lipoprotein (LDL) ≥130 mg/dL, high-density lipoprotein (HDL) ≤40 mg/dL, triglycerides (TG) ≥150 mg/dL; or having any two abnormal lipid parameters) performed, the highest TG levels were significantly associated with the lowest HDL levels. The lowest HDL levels were significantly associated with the highest 튀었기 의해 공급된(17 kg/m²) patients.

Results: Among 12,513 (65% women; median IQR age, 36 (30-42) years; CD4 count <200 cells/mm³) patients, 43 (1%-2%) patients had underlying (17 kg/m²) patients, in a multivariate analysis adjusting for age, sex, weight, BMI, CD4, WHO stage, Hgb and ALT. The lowest HDL levels were significantly associated with the most immunosuppressed (WHO Stage IV and CD4 < 100 cells/mm³) patients.

Conclusions: In this HIV-infected, ARV-naïve, Tanzanian population the prevalence of dyslipidemia was high and associated with immunosuppression (WHO Stage IV and CD4 < 100 cells/mm³) and underweight (BMI <17 kg/m²) patients.

The unique needs of patients with HIV-associated neurocognitive disorder: improving patient care through a retrospective chart review

M. Halman1,2,3, S. Stranks1, N. Schafer-McDaniel4, A. Stewart

Background: HIV-Associated Neurocognitive Disorder (HAND) is a common sequela of HIV that affects up to 20-40% of patients in the late stages of the disease. While combination antiretroviral therapy may yield some benefit, neurocognitive recovery is generally incomplete. The aim of this study is to explore the unique needs of patients with H-AND.

Methods: A retrospective chart review of all 87 patients cared for in 2008 at Casey House, a community-based facility dedicated to supportive and palliative care for persons with HIV in Toronto, Canada, provides information on patient demographics, medical and psychiatric history, and management plans. Patients were mostly men (80.5%) with a mean age of 48.9 years (SD=10.5). Almost half (47.1%) of these patients experienced H-AND.

Results: 73% of all patients were on HAART, taking an average of 3.3 antiretrovirals (SD=2.2) with a mean Clinical Plasma Virus Load (CPL) score of 2.08 (SD=0.7). The mean current CD4 count was 225 (SD=231.7) and 25.3% had a non-detected viral load. 19.5% of the patients died. 21.8% of the patients were classified as having mild-cognitive impairment, 16.1% had HIV-Associated Dementia and a further 9.2% had a co-morbid central nervous system condition. There was a marginally significant difference in the CD4 count between patients who were neurologically normal (M=181) and those who were neurologically impaired (M=265.98, p=0.095). There were no further differences with regards to: non-detectable viral load, CPL score, or deaths.

Conclusions: When using brain imaging, screening neurocognitive testing and visuoconstruction were excluded. Statistical analysis included Independent Student’s t test or U Mann Whitney tests when appropriate. Individual tests of significance were transformed into z scores to determine the number of cognitive domains affected and classify patients according to the HAND classification.

Results: The group averages 38 in age (53% male) and 9 years in education. Significant differences were found between the groups on tasks of memory, verbal fluency, attention, executive function and visuoconstruction. 89% of the patients were classified as Asymptomatic Neurocognitive Impairment (ANI) without functional decline. 11% of the patients were moderate/severely impaired. Despite the cognitive impairment of last group, patients could not be classified as HIV-associated Mild Neurocognitive Disorder or HIV-Associated Dementia because the lack of functional decline.

Significant correlation were observed between tasks of memory; verbal fluency and % CD4 nadir. Conclusions: Neurocognitive assessment conducted in this patient group allows saying that HAND seems to occur even in patients with virological suppression and low preHAART CD4 nadir. The discordance between cognitive and functional impairment could be due to cultural differences that are not captured by the test used. This difficulty could affect the classification of patients according to HAND -HIVRC criteria.
WEPE0066
Increased blood phenylalanine to tyrosine ratio in HIV-1 infection and correction following effective antiretroviral therapy

R. Zangerle1, K. Kuri2, G. Neurauter2, M. Kichen3, M. Sarcetti4, D. Fuchs5
1Medical University Innsbruck, Dept. of Dermatology and Venerology, Innsbruck, Austria; 2Medical University Innsbruck, Dept. of Internal Medicine, Innsbruck, Austria, 3Medical University Innsbruck, Division of Biological Chemistry, Biocenter, Innsbruck, Austria

Background: Higher blood levels of the essential amino acid phenylalanine (phe) have been documented in patients with HIV-1 infection. They may relate to a diminished conversion of phe to tyrosine (tyr) by the enzyme phenylalanine hydroxylase (PAH). PAH is rate-limiting in the biosynthesis of dopamine, and impaired PAH activity is reflected by an increased phe to tyr ratio.

Methods: Plasma phe/tyr was measured in 107 patients with HIV-1 infection before and after 12 months of effective antiretroviral therapy (ART). Results were compared with CD4+ cell counts, HIV-1 RNA levels and concentrations of immune activation marker neopterin.

Results: Before ART, phe/tyr was mean+/-S.D.: 0.99+/-0.57 µmol/µmol. Phe/tyr correlated significantly with plasma and urine neopterin concentrations (rs=0.173 and CD4+ counts (rs=-0.182, both p<0.05). After ART, phe/tyr dropped to 0.72+/-0.16 (+27%; U=5.21, p=0.01) which was due to an average decline of 14% of phe concentrations from 73.1+/-34.0 µmol/l at baseline to 62.9+/-17.8 µmol/l after ART (U=2.51, p=0.01) and a parallel increase of tyr concentrations (+13% U=2.46, p=0.01). In parallel, significant reductions of plasma and urine neopterin concentrations were observed during ART.

Conclusions: Increased phe/tyr is frequent in patients with HIV-1 infection and is related to immune activation. ART was found to decrease phe/tyr and this change could be reflected on PAH activity. Future studies might be able to show whether the decline of phe/tyr under ART may concur with the often impaired neurophysiologic status in treated patients.

Presenting author email: astewart@caseyhouse.on.ca

WEPE0067
Verbal communication in HIV patients: toward a description of clinical communication impairment profiles

V. Abusamra1, L. Abusamra2, B. Sampedro3, M. Guemes2, M. Macaya2, D. informação de datos1, D. Íñiguez2, E. Rodríguez2
1University of Buenos Aires, Linguistic, Ciudad Autónoma de Buenos Aires, Argentina; 2Hospital Eva Perón, Neuropsychology, Buenos Aires, Argentina, 3Fundación Huésped, Infectious Diseases, Ciudad Autónoma de Buenos Aires, Argentina; 4University of Buenos Aires, Psychology, Ciudad Autónoma de Buenos Aires, Argentina

Background: The dysfunction of cognitive functioning is a frequent complication in HIV-positive patients. Deficits in communicative skills sometimes can be found in this relationship. Moreover, the clinical profiles of communication impairments in HIV patients, including their correlation with underlying cognitive deficits, are still unreported.

The objectives of this research were: (1) to evaluate the proportion of patients with HIV that present verbal communication deficits by applying Protocol MEC; (2) to describe verbal communication impairment profiles in patients with HIV; and (3) to promote a better understanding of the difficulties these patients experience.

Methods: We evaluated 20 patients that met the following criteria for inclusion: over 18 years of age; HIV-positive; native speakers of Spanish; no alterations in language acquisition, reading, or writing; no history of neurologically or psychiatric conditions; and patients with antiretroviral treatment (no safenavir) with viral load > 50 copies/ml, and patients without treatment.

They were evaluated with Protocol MEC, which values verbal communication abilities, and with five neuropsychological tests that evaluate basic cognitive abilities (executive functions, attention, inhibition processes, and working memory).

Results: We compared patients' performances with the "alert points". The results for each task were turned into score 2 on the basis of Protocol MEC normative data. A hierarchical cluster analysis was carried out to identify subgroups with different profiles according to the areas that were affected. The clinical clusters were detected: CLUSTER 1: Pragmatic/discursive deficits; CLUSTER 2: Semantic/pragmatic deficits; CLUSTER 3: Semantic/ discursive deficits; CLUSTER 4: Wild deficits; CLUSTER 5: Heterogeneous alterations.

Conclusion: The detection of communication deficit profiles in HIV patients were useful for establishing the starting point for the identification of clinical profiles among HIV patients.

Presenting author email: valeriaa@fi bertel.com.ar
WEPE0071

A common treatable comorbidity: prevalence and predictors of depression and anxiety disorders in HIV-positive outpatients in rural Tanzania

K. Marwick1, S. Kaaya2

1University of Edinburgh, Edinburgh, United Kingdom, 2Muhimbili University of Health and Allied Sciences, Dar-%s

Background: HIV/AIDS is associated with significant mental health morbidity in high income countries. Depression associated with HIV/AIDS has been linked to poor medication adherence. Depression can be effectively treated in both high and low income countries. However, research on mental health in those with HIV/AIDS is scarce in sub-Saharan Africa. The objectives of this study were to: 1) assess the prevalence of depression and anxiety disorders in HIV-positive Tanzanian outpatients; 2) identify and assess the factors associated with depression and anxiety; and 3) identify and assess the factors associated with motivation for treatment.

Methods: This was a cross-sectional study of 220 HIV-positive outpatients at a dedicated rural Tanzanian HIV/AIDS care centre. The sample was a convenience sample of patients selected on patient-identified needs. Response rate was 97%. Assessment included sociodemographics, clinical variables, and prevalence of ICD-10 common mental health diagnoses via a structured psychiatric interview with a trained psychiatrist. The diagnosis of depression was based on the Structured Clinical Interview for DSM-IV (SCID). The diagnosis of anxiety was based on the Structured Clinical Interview for DSM-IV (SCID) and the Hamilton Depression Rating Scale. The Patient Global Impression of Change (PGIC) was used to assess motivation for treatment.

Results: The prevalence of depression was 42% (42/100) and of anxiety was 47% (47/100). In multivariate analysis, depression was related to psychosocial factors (family support) and anxiety was related to psychosocial factors (work-related stress). The PGIC was 55% (55/100) for patients with depression and 65% (65/100) for patients with anxiety.

Conclusions: Depression and anxiety are common in HIV-positive outpatients in rural Tanzania. The prevalence rates are among the highest reported in sub-Saharan Africa. Depression and anxiety are associated with psychosocial factors, and treatment motivation is high for both disorders. These findings have important implications for the treatment of HIV-positive outpatients in rural Tanzania.

WEPE0072

Depression and its impact on quality of life (QOL) in HIV-positive patients in India

S. Devgun1, M. Negi2, A. Subramanian1, A. Joshi3, N. Nischal4, R. Nehru5

1Anand Akad Medical College, Medicine, New Delhi, India, 2Tata Institute of Psychiatry, Mumbai, India, 3Tata Institute of Social Sciences, Mumbai, India, 4Tata Institute of Social Sciences, Mumbai, India, 5Tata Institute of Social Sciences, Mumbai, India

Background: Depression and its impact on quality of life (QOL) in HIV infected patients in India have not been studied. The present study assessed the occurrence of depression in treatment naive HIV patients and its impact on QOL.

Methods: In this observational cross-sectional study 60 treatment naive HIV-positive adult patients (30 with CD4 count < 200/cumm, 30 with CD4 count > 200/cumm) underwent clinical evaluation and baseline investigations and were studied. Statistical correlations between depression and QOL were evaluated.

Results: There were 37 male and 23 female patients with mean age of 33.49 ± 6.7 years and 29.30 ± 6.2 years. Overall, 70% of patients had depression. Severity of depression was more in subjects with CD4 counts < 200 (Cumm, p = 0.03). 25% of patients with CD4 counts > 200/cumm were depressed (p < 0.05). Among subjects with CD4 count < 200/cumm, 87% were depressed. Mean QOL scores for physical and psychological domains were significantly lower among the depressed subjects (p < 0.05). Severity of depression also correlated with QOL.

Conclusions: Depression is common in HIV infected subjects especially among those with more severe disease. Depression also emerged as an important determinant of QOL in HIV patients with depressed patients having significantly greater impairment in all domains of the quality of life measures, when compared with non-depressed patients. This emphasizes the need for early depression detection and treatment for the HIV-infected patient.

Author Index

A. Buchanan1, M. Rice2, G. Silbery3, K. Malese4, T. Frederick5, M. Purswami6, H. Hoffman7, P. Sirous8, R. Smith9, R. Williams1, for the Pediatric HIV/AIDS Cohort Study (PHACS)

1Harvard School of Public Health, Center for Biostatistics in AIDS Research, Boston, United States, 2University of Kansas, Dole Human Development Center, Lawrence, United States, 3Epidemiology and Preventive Medicine, Keck School of Medicine, University of Southern California, Los Angeles, United States, 4Bronx-Lebanon Hospital Center, Albert Einstein College of Medicine, Pediatrics Department, Bronx, United States, 5National Institute for Deafness and Other Communication Disorders, Bethesda, United States, 6Tuane University Health Sciences Center, New Orleans, United States, 7University of Illinois at Chicago, Chicago, United States

Background: Children perinatally infected with HIV (HIV+) are at risk for impairments in cognitive functioning, including language impairment (LI). HIV+ exposed but uninfected (HIV-) children from comparable family and socioeconomic backgrounds often face similar risks. We compared the prevalence of LI for HIV+ to HIV- children (age 7-16 years) enrolled in the Adolescent Master Protocol, a longitudinal cohort study within PHACS.

Methods: Language was assessed using a comprehensive standardized language measure (CELF-4, available in English and Spanish); LI was defined as performance more than 1 SD below population mean. Nonverbal cognitive abilities were evaluated using the WISC-IV. Hearing status was determined by audiological exam or parental report. Children were classified as having primary LI (with monolingual language exposure and no cognitive or hearing impairment), secondary LI (monolingual with cognitive or hearing impairment), or no LI. Logistic regression models adjusted for parent education, biological markers of stress. Stress management activities in HIV+ individuals may be useful in reducing symptoms of LI.

Presenting author email: r71@nova.edu
WEPE0075
Cognitive impairment in HIV over 60 years of age

V. Valkovic1, K. Nicolas1, B. Raebaudha1, H. Rosen2, B. Miller1
1UCSF, Geriatric Medicine/Medicine, San Francisco, United States, 2 Hawaii Center for AIDS, AIDS/Behavioral Health, Honolulu, United States, 3 Memory and Aging Center, Neurology, San Francisco, United States

Background: The availability of effective combination antiretroviral medications has extended HIV life expectancy into the 7th decade for many patients. The exponential rise in prevalence of neurodegenerative disorders with advancing age and recent data suggestive of accelerated brain aging in HIV are worrisome that high rates cognitive impairment will be seen.

Methods: Community-dwelling HIV+ subjects over 60 years of age were enrolled into the Alzheimer’s Disease Research Center (ADRC) at UCSF. Each completed cognitive testing, neurological examination, behavioral assessment, brain MRI and independent proxy assessment of everyday functioning. Cases were reviewed in a multidisciplinary conference and assigned cognitive diagnoses.

Results: To date, 60 HIV men and 2 HIV women were enrolled. 54 were age 60-70, of which 32 have completed all assessments and have been diagnosed. Among these, 53% had normal cognitive performance. Only 5% met criteria for HIV-associated dementia whereas 23% had Mild Cognitive Impairment and 19% had Asymptomatic Neurocognitive Impairment. When compared to 33 HIV-negative control subjects aged 60-70, impaired HIV individuals performed worse on most cognitive domains but sparing visuospatial skill and visual memory.

Conclusions: Nearly half of HIV subjects had cognitive impairment in this sample. Despite use of objective proxy informants, asymptomatic impairment remains a common finding in this HIV population as noted in younger HIV cohorts. The rate of impairment is similar to reports enrolling younger cases and strongly contrasts to the hypotheses of accelerated brain aging. Since most previous studies examined aging in younger HIV populations, it remains possible that the oldest old will have altered risk due to survivor effects. Since apolipoprotein E4 (APOE4) is associated with early mortality in HIV and is a known risk factor for Alzheimer’s disease, this survival tendency may have a direct neurodegenerative impact. APOE characterization of this cohort is planned. This work supported by K23AG032872 (VU) and P 30 AG023351 (BM).

Presenting author email: vvalcour@memory.ucsf.edu

WEPE0076
Event-related potentials and cerebrospinal fluid markers of HIV-associated neurocognitive disorder

J.W. Husstedt1, E. Koutsi2, P. Young1, N. Gregor1, G. Arendt2
1University Hospital of Muenster, Department of Neurology, Muenster, Germany, 2University Department of Psychiatry, Wuerzburg, Germany, 3University of Dusseldorf, Department of Neurology, Dusseldorf, Germany

Background: Prevalence of HIV-associated neurocognitive disorder (HAN) is increasing, and also patients at a very advanced stage of HIV always remain up to now data matter of discussion. Methods: 36 HIV+ patients of different stages were included for this study. Event-related potentials (ERP), C4D+ cell count and viral load in plasma and CSF, routine CSF analysis, special CSF analysis of dopamine (DA), 3,4 Dihydroxyphenylacetic acid (DOPAC), homovanillic acid (HVA), beta-aminolyd (BA), total tau (TT) and phosphorylated tau (PT) were analyzed. Further more Hamilton depression-scale (HDS) was performed.

Results: The mean (all data as mean value; mv) age was 44 years, HIV-infection lasted since laboratory detection 7.9 years. LV was 6677 c/ml for CSF and 11.6 c/ml for blood. C4D+ cells significantly correlated to the amount of cells in CSF, duration of HIV-infection, C4D+ cell count and BA. ERP were significantly correlated to the number of cells in CSF, amount of MND (symptoms) and development of the dementia. spends was significantly correlated to MND stages. HAART reduced TT significantly.

Conclusions: HIV-infection of the CNS induces profound changes of cognition, which are easily to detect using ERP. Besides correlation to the general markers of HIV infection of the CNS as e.g. LV in CSF ERP as a measure of HAN are much more correlated to the development of the markers of dementia than to the changes of the dopamineergic system. HAART has a direct influence of the development of TT, whereas BA and PT are not directly influencing. The results of this study highlight the complex correlations between cognition and the changes of typical biochemical substances for development of HAN in the CSF. The results of this study have important implications for the understanding of HAN and further therapeutic strategies.

Presenting author email: husstedt@uni-muenster.de

WEPE0077
Evaluation of the effect of NGX-4010 (QUTENZA®), an 8% capsaicin patch, on neurosensoric function in patients with HIV-associated distal sensory polyneuropathy: results of integrated analyses

D. Simpson1, D. Clifford1, S. Brown1, J. Tobiari1, G.F. Vanhout2
1Mount Sinai School of Medicine, Neurology, New York, NY, United States, 2Washington University School of Medicine, Neurology, St Louis, United States

Background: NGX-4010 (QUTENZA®) is an 8% capsaicin patch that has been approved by the FDA for peripheral neuropathic pain in diabetic patients.

Methods: Data were derived from 205 patients treated with NGX-4010 in five HIV-DSP studies, including 180 HIV-DSP patients treated more than once. At screening, Week 12/termination and Week 48 (termination for patients enrolled in open-label, re-treatment studies), deep tendon reflexes, pain, and warm sensations were evaluated in the treatment area. Change from screening was categorised as decreased, no change, increased or increased above normal (deep tendon reflexes only). A Cochran-Mantel-Haenszel correlation test was used to test differences in proportions of patients in each change category between NGX-4010 and control and by number of treatments received. In addition, analyses were performed in 38 patients treated with up to eight treatments. A median follow-up duration of 30 months.

Results: Most NGX-4010 patients had no change in neurosensoric function from screening to Weeks 48/termination. Most of these patients had an improvement in neurosensoric function. There were no trends in change in neurosensoric function by number of treatments received. Similarly, longer-term (follow-up range >43 months) safety data collected in 38 patients showed no detrimental effects of up to eight exposures on neurosensoric function.

Conclusions: Single and repeated treatment with NGX-4010 does not appear to impair further neurosensoric function in patients with HIV-associated neuropathy.

Presenting author email: david.simpson@mssm.edu

WEPE0078
Incidence, medical and psychosocial predictors of psychiatric events among HIV-infected patients on ART: a 11-year follow-up study

C. Protosposescu1,2, L. Michel1, C. Brunet-François1, D. Salmon1, R. Verdon1, G. Chêne1, V. Villess1, M.P. Carrieri1,2, L. Leprénier1, E. Koutsilieri2, P. Young1, N. Gregor1, S. Evers1, G. Arendt2
1University Hospital of Muenster, Department of Neurology, Muenster, Germany, 2University Department of Psychiatry, Wuerzburg, Germany, 3Hôpital E Roux, Limeil-Brévannes, France, 4CHRU Hôtel Dieu, Nantes, France, 5CHU Cochin, Paris, France, 6CHU Côtes de Nacre, France, 7INSERM, U912, Bordo, France, 8INSERM, Université Paris Diderot-Paris 7, Paris, France

Background: Psychiatric disorders are relatively common among patients receiving combination antiretroviral therapy (ART); however, there are few prospective studies about their rates and determinants. This analysis aimed to measure the psychiatric events (PE) incidence among the cART-treated patients of the French APROCO-COPILOTE cohort, and to identify their medical and psychosocial correlates.

Methods: APROCO-COPILOTE is a cohort of patients started on a PI-containing regimens in 1997-1999, with prospective medical records and self-administered questionnaires collecting socio-demographic and psychosocial data. This analysis includes all visits corresponding to a 11-year follow-up for the 1095 patients who have completed baseline self-administered questionnaires. A recurrent-events Cox model was used to identify the factors associated with PE. First, all PE documented in medical records were considered. A second analysis focused only on diagnosis of depression, suicides and suicide attempts.

Results: The overall follow-up prevalence of PE remained low and decreased slowly over time: 47 patients experienced 63 PE (incidence rate 95% CI modification per 100 person-years). Depression (n=16) and suicides/suicide attempts (n=15) were the most prevalent PE (0.48±0.34;0.40±0.68 per 100 person-years).

In the first analysis younger age, being native to the European Union, shorter duration of infection and higher HIV viral load over time were identified identified as independently associated factors.

In the second analysis multivariate model revealed that depression/suicides/ suicide attempts events were independently associated with male gender, younger age, absence of opportunistic infections at baseline, higher viral load over time and absence of good adherence to the cART. Multivariate results showed that patients who reported having completed a high school certificate were less likely to experience diagnosed depression/suicides/suicide attempts.

Conclusions: Although PE in HIV-patients have a relatively low incidence, our findings emphasize the importance of regular screening for their long-term occurrence, especially in younger male patients. Control of viral load may help to limit the occurrence of psychiatric disorders.

Presenting author email: dominique.salmon@cch.aphp.fr

WEPE0079
Diagnostic utility of the International HIV Dementia Scale for asymptomatic HIV-associated neurocognitive impairment and HIV-associated neurocognitive disorder in South Africa

D. Singh1, K. Goodkind1, D.J. Hardy1, E. Lopez1, G. Morales1
1McColl Hospital, Psychiatry, Durban, South Africa, 2Cedars-Sinai Medical Center, Psychiatry and Biobehavioral Sciences, Los Angeles, United States, 3University of California at Los Angeles, Los Angeles, United States, 4Loyola Marymount University, Psychology, Los Angeles, United States

Background: Preliminary reports from sub-Saharan Africa suggest that over two-thirds of HIV+ persons suffer from asymptomatic HIV-associated neurocognitive impairment (ANI) or HIV-associated neurocognitive disorder (MND). The current International HIV Dementia Scale (IHDS) as a diagnostic tool for HIV-associated dementia in diverse populations. The necessity of this condition is challenging but must be addressed.

Methods: Seventy participants (20% women, mean age 37.7±13.2 years, mean CD4 count 325 cells/ml) were recruited randomly from an HIV voluntary testing and counseling clinic in Durban, South Africa. Participants screened to determine IHDS testing and two neuropsychological (NP) tests -- Digit Span (forwards
WEPE0080
Relationships between antiretroviral neuroeffectiveness, adherence and minor cognitive disorders in HIV-infected patients

M. Baggio1, N. Ciccirelli1,2, S. Di Giambenedetto1, J. Fantil1, M. Colafıgli2, L. Bracciale1, G. De Matti1, C. Pinetti1, R. Caudea2, M. C. Silver1, A. R. Defilippi3, M. S. Montano4
1Catholic University of Sacred Heart, Institute of Clinical Infectious Diseases, Rome, Italy, 2Siena University Hospital, Infectious Diseases Unit, Siena, Italy, 3Siena University Hospital, Infectious Diseases Unit, Siena, Italy, 4US Naval Medical Research Center Detachment, Iquitos, Peru

Background: The mutual relationship between neurocognitive performance and medication adherence in the era of modern cART needs to be explored. Objectives of the study was to assess the correlation between neurocognitive performance and antiretrovirals adherence and between central nervous system penetration-effectiveness (CPE) rank and cognitive functioning.

Methods: Among asymptomatic HIV-infected patients on cART undergoing neurocognitive assessment in a cross-sectional cohort survey, we retrospectively selected those who also received a questionnaire investigating self-reported adherence. The interval between cognitive and adherence evaluation was 12 months. Cognitive evaluation included tasks exploring memory, attention and executive abilities. Patients were considered cognitively impaired if a comparison with matched healthy HIV-negative subjects was performed. CPE-rank was calculated for each cART regimen according to CHARTER group. Relationships between adherence, CPE-rank and cognitive performance were assessed by linear or logistic regression analysis.

Results: Overall, 101 patients (65.3% males, median age 47 years IQR 42-52, 22.8% with past AIDS-defining events, median CD4 620/DL IQR 454-827, 98% with HIV-RNA<50 copies/ml) were included. Fifty (49.5%) subjects resulted cognitively impaired. Adherence (measured on a 0-100 visual analogue scale) was 81% (SD 16), with 63.6% reporting an adherence>80%. CPE-rank<1.5 was independently associated with a lower risk of cognitive impairment (p=0.032) and showed a trend in the interval of cognitive impairment (p=0.030). Adherence<80% was associated with cognitive dysfunction in univariate analysis (p=0.032) and showed a trend in the interval of cognitive impairment (p=0.080). In investigating any single cognitive domain, cognitive dysfunction in univariate analysis (p=0.032) and showed a trend in the interval of cognitive impairment (p=0.030). Adherence<80% was associated with cognitive dysfunction in univariate analysis (p=0.032) and showed a trend in the interval of cognitive impairment (p=0.080). Investigating any single cognitive domain, cognitive dysfunction in univariate analysis (p=0.032) and showed a trend in the interval of cognitive impairment (p=0.080).

Conclusions: High prevalence of minor cognitive disorders was observed in apparently asymptomatic HIV+ individuals. A relationship between cognitive impairment and adherence was found. In particular, memory performance and adherence were significantly associated. Moreover, cognitive impairment was associated with a lower CPE-rank. Longitudinal investigation is necessary to understand the dynamics of relationships between adherence, neuro-effectiveness of antiretroviral drugs and cognitive impairment.

Presenting author email: massifab@alice.it

WEPE0081
Frequency of neuropathy in HIV-infected adults

Y. Núñez Coronado1, P. Martínez Esteban2, M. Casapia, S.M. Montano Torres1, J. Zuní1
1IHN, Neurology, Lima, Peru, 2Asociación Civil Selva Amazonica, Infectología, Iquitos, Peru, 3US Naval Medical Research Center Detachment, Virology Department, Lima, Peru, 4Washington University, Neurology and Global Health, Seattle, United States

Background: Peripheral neuropathy (PN) is a common complication in HIV-infected adults. The incidence of PN has declined since the introduction of highly active antiretroviral therapy (HAART), but remains an important complication of AIDS, especially in resource-poor countries. The objective was to determine the frequency of peripheral neuropathy in HIV-infected adults in Iquitos, Peru.

Methods: Cross-sectional study, the HIV-infected adults were evaluated with a detailed medical and neuropsychiatric history and electromyography (EMG). PN was diagnosed based in clinical and electromyographic findings.

Results: Subjects were enrolled and evaluated; the average age was 30.17 years (standard deviation 7.39 years; range 19-53), and mean duration of HIV infection was 2.68 years (5.2 2.62 years; range 45 days-30 years) among 40 (40%, 59) males. Evidence of PN was detected in 13 (30.95%). Specific neuropathies detected (included: distal sensory polyneuropathy in 9 (5,45, peripheral neuropathy in 1 (2.38%), sural sensory neuropathy in 1 (2.38%) and small fiber neuropathy in 7 (16.67%). The symptoms and signs of PN were paraesthesia in 22 subjects (52.38%), dysesthesia in 16 (38.09%) and distal sensory hypoaesthesia in 14 (33.3%). The average CD4 cell count in these patients was 249.46 cells (S.D.

148.32 cells). 46.15% were in stage of infection. Three subject (7.69%) had moderate malnutrition and 29 (69.23%) were receiving HAART.

Conclusion: PN remains a common complication in HIV-infected patients. The most common form of PN was small fiber neuropathy (30.95%), which was associated with stage C infection. The most frequent signs of PN were paresis, dysesthesia and distal sensory hypoaesthesia.

Presenting author email: yesenianc@hotmail.com

WEPE0082
Characterizing neuropsychobehavioral decline among HIV groups in Zimbabwe: a pilot study

D. Echeverria1,2, D. Kasprzyk1,3, C. Ndhlovu4, K. Mangwende5
1Catholic University of Sacred Heart, Memory Clinic, Rome, Italy, 2Battelle CPR, Centers for Public Health and Evaluation, Seattle, United States, 3University of Washington, Dept of Environ Health, Seattle, United States, 4University of Washington, Global Health, Seattle, United States, 5University of Zimbabwe, Community Health Intervention Project, Harare, Zimbabwe

Background: The prevalence of HIV associated dementia (HAD) was estimated in the 1990s to be as high as 25-30% among patients with advanced HIV disease and low CD4 counts. With the advent of HAART, a less pronounced form of neurologic dysfunction, termed minor cognitive/motor disorder (MCD) may be more prevalent than HAD at CD4 counts >200/ml. These findings support a pilot study to assess potential deficits in CNS decline and determine whether HAART provides adequate protection.

Methods: Based on recent CD4 count, a cross-sectional 3-hour neuropsychobehavioral pilot study was conducted in a community sample living in Harare Zimbabwe: n=30 controls; n=28 if CD4 counts >200/ml; n=32 if CD4 counts <200/ml; and n=30 if on Antiretroviral Therapy for at least 2 years. Inclusion criteria required fluency in English and no alcohol related deficits within the interval of the assessment. Controls were group-matched on age, gender, and education.

Results: Scores demonstrated consistency in the expected direction for 20 out of 23 measures across 8 a priori principal component domains: motor speed, attention, working memory, visual memory, verbal memory, selective attention, and visuomotor skill. All 8 domains were statistically different and adversely affected for the symptomatic <200 CD4 count/mi group, whereas measures for cognitive flexibility, visual memory, and attention remained unaffected for the >200 CD4 count/mi group. Performance for the ARV user group did improve but were not equivalent to that of controls. Summary scores for motor speed and visual memory still remained adversely affected. This is the first feasibility study to be conducted in Zimbabwe. The results are consistent with that in the literature and support a prospective study in sub-Sahara Africa designed to capture both protective and deleterious determinants of neurobehavioral scores that alter trajectories of cognitive decline pre/post seroconversion.

Presenting author email: echeverri@battelle.org

WEPE0083
Increased prevalence of chronic kidney disease in HIV-infected patients despite successful antiretroviral therapy


Issues: Despite successful antiretroviral therapy, there are increasing concerns about deterioration of kidney function in HIV-positive patients. The aim of this study was to evaluate the prevalence of chronic kidney-disease (CKD) in a cohort of HIV-infected-patients at AIDS-Healthcare-Foundation in Los Angeles from the years between 2004 and 2008.

Description: We retrospectively reviewed electronic-medical-records of patients, and identified those that had a diagnosis of CKD defined as having eGFR ≤60 ml/min/1.73 m² and/or structural kidney damage (proteinuria, dysmorphic erythrocytes on urinalysis, and abnormal renal imaging) for ≥ 2 months.

Lessons learned: The mean age of the patients was 47.9 yrs (22-75), they were mostly men (80.5%), and were ethically African-American (24.9%), Latino (36.1%), Caucasian (27.1%), Asian/Pacific-Islander (2.9%), and Native-American (0.16%). All patients had undetectable HIV-RNA and the same morbidities [diabetes and hypertension (graph not shown)]. In 2004, 79 cases of CKD were identified (presence of CKD -1.5%, total patients 5000), compared to 334 cases in 2008 (prevalence 5%: total patients 6000). Notably, the rate of increase in CKD began to change more exponentially in 2006 (~14/15000, 2.5%). However, the percentage of CKD patients requiring hemodialysis decreased from 2004 through 2008, respectively 27% (n=2279) and 12% (n=4133). Graph-1 summarizes the major findings.

Presenting author email: yesenianc@hotmail.com

WEPE0084
HIV-associated renal disease WEPE0083-WEPE0086
WEPE0084
Review of HIV infected patients with end stage renal disease over a one year period (2001 to 2009) in the Center for Comprehensive Care, St. Luke’s-Roosevelt Hospital Center, New York, USA

G. Psevdos, T. Mack, G. Joseph-Wills, R. Kanthula, J. Park, V. Sharp
St Luke's Roosevelt Hospital Center, Center for Comprehensive Care, New York, United States

Background: In HIV-infected patients, Chronic Kidney Disease (CKD) is associated with AIDS progression and death. There is limited literature on end stage renal disease (ESRD) and HIV. We analyzed HIV-infected patients with ESRD on hemodialysis.

Methods: A retrospective chart review of 106 HIV-infected patients from 10/31/01 to 12/31/09 in an urban HIV clinic was conducted. 409 patients had a serum creatinine above 1.5 mg/dl and 90 patients received hemodialysis. We analyzed demographic/laboratory data, co-morbidities, etiologies of kidney failure, kidney biopsies and treatment outcomes.

Results: The prevalence of ESRD was 90/5646, 1.59%. The cohort's characteristics were: mean age of HIV acquisition 36.4 years (1-67), mean age at start of hemodialysis: 45.3 years (18-73); male gender 66% (70/92); African American race 83%, Hispanic 13%, Caucasian 2%, American Indian 1%. CKD risk factors: 31.1% MSM, 45.5% Heterosexual, 22.2% IV drug use and 1.1% IDU. Mean duration between HIV and HF diagnosis was 12.31 years. Mean CD4 count and viral load in these patients were 212.86 cells/mm3 and 84214.38 copies/ml respectively. The prevalence of CVRFs was: hypertension 30%, dyslipidemia 11.6%, coronary artery disease 9.11.6% and diabetes 11 (14.2%) and valvulopathy in 2 (2.5%) patients. Mean proteinuria was 1 mg/mmol and mean ejection fraction 37.4%. Mean number of hospitalizations of these patients over one year was 8.6 (4.6). Forty-seven (61%) patients had CKD. Patients with CKD had significantly higher hospitalizations in one year compared to those without CKD after correcting for age, CD4 count, CVRFs, ejection fraction, and the number of medications used. Further analysis and correlation matrices will be presented.

Conclusions: In our study of HF in patients with HIV/AIDS, only CKD was found to be associated with recurrent hospitalizations. No other factors, including anemia, CD4 count, viral load, cocaine use or other CVRFs, were significantly associated with rate of hospitalization.

Presenting author email: srich@chpnet.org

WEPE0085
Evaluation of factors predisposing to recurrent hospitalization in HIV-infected patients with heart failure at St Luke’s Roosevelt Hospital Center, New York, USA

S.B. Devarajally, S.S. Hoekote, G. Psevdos, T. Mack, V. Sharp
St Lukes Roosevelt Hospital, Columbia University College of Physicians & Surgeons, New York, New York, United States

Background: We aimed to describe the clinical characteristics of patients with heart failure (HF) and HIV/AIDS admitted to hospital and study the factors affecting recurrent hospitalizations in these patients.

Methods: We reviewed charts of 77 out of 2070 consecutive HIV/AIDS patients with HF hospitalized over one year. Demographic data, cardiovascular risk factors (CVRFs), echocardiographic findings and number of hospitalizations over one year were recorded. Chronic kidney disease (CKD) was defined as glomerular filtration rate less than 60 ml/min over three months. Continuous variables are expressed as mean (standard deviation). Univariate models were used to determine association of factors with number of hospitalizations and the chi-square test was used to calculate odds ratio.

Results: There were 59 males and 18 females; mean age of patients was 54.2 (±14.1) years. Mean duration between HIV and HF diagnosis was 12.31 (±5.9) years. The mean CD4 count and viral load in these patients were 212.86 cells/mm3 and 84214.38 copies/ml respectively. The prevalence of CVRFs was: hypertension 30%, dyslipidemia 11.6%, coronary artery disease 9.11.6% and diabetes 11 (14.2%) and valvulopathy in 2 (2.5%) patients. Mean proteinuria was 1 mg/mmol and mean ejection fraction 37.4%. Mean number of hospitalizations of these patients over one year was 8.6 (4.6). Forty-seven (61%) patients had CKD. Patients with CKD had significantly higher hospitalizations in one year compared to those without CKD after correcting for age, CD4 count, CVRFs, ejection fraction, and the number of medications used.

Conclusions: In our study of HF in patients with HIV/AIDS, only CKD was found to be associated with recurrent hospitalizations. No other factors, including anemia, CD4 count, viral load, cocaine use or other CVRFs, were significantly associated with rate of hospitalization.

Presenting author email: srich@chpnet.org

WEPE0086
The prevalence of renal impairment among WHO stage 1 and 2, HIV-positive, antiretroviral naïve adults in Blantyre, Malawi

G. M. Struij1, R.A. den Exter1, D. Chipeta2, C. Munthali2, J. Toy1, C. Olatunbosun1, M. Harris2, S. Kanters3, C. Woods3, J. da Silva1, T.I. Allan2
1St. Paul’s Hospital, Providence Health Care, Pharmacology, Vancouver, Canada, 2St. Paul’s Hospital, Providence Health Care, Pharmacy, Vancouver, Canada, 3BC Centre for Excellence in HIV/AIDS, Vancouver, Canada

Background: Renal insufficiency is a known risk factor for mortality in HIV-infected patients. However, few data exist about RI in Malawian HIV-infected adults. We aimed to determine the prevalence of RI in patients referred to the ART clinic at Queen Elisabeth Central Hospital, a 1100 bed teaching hospital in Blantyre, Malawi.

Methods: All newly referred HIV infected adults with WHO clinical stages 1 or 2 were enrolled. At presentation, blood pressure and weight were measured, urine dipstick and microscopy, CD4 and serum creatinine were performed. We calculated estimated GFR (eGFR) using the abbreviated MDRD equation without ethnicity factor.

Results: 532 Patients were recruited, 67% were females, median age was 33 (IQR 18-73) years; median CD4-count was 288 (IQR 159-419) cells/µl.
Prevalence of RI defined as an eGFR < 90 ml/minute/1.73m2, was 50%, 42% had mild (60-89 ml/min/1.73m²), 16% had moderate (30-59 ml/min/1.73m²), and 2% had severe (< 30 ml/min/1.73m²). Prevalence of proteinuria (≥ 100 mg/dl) was 23% and 8% respectively.

Patients with a CD4-count < 200 had no increased risk for RI when compared to those with a CD4-count ≥ 200: overall RI 51% vs 50%, mild RI 32% vs 31%, moderate RI in 16% vs 17% and severe in 2% vs 3% (p<0.05). In-patients with a CD4-count < 200, prevalence of proteinuria (≥ 100 mg/dl) was 6%; in those with a CD4-count ≤ 200 it was 12% (p<0.02).

Conclusion: RI was very common among HIV-infected patients with clinically non advanced HIV disease. In contrast to other studies proteinuria was not associated with RI. This makes the usefulness of urine dipstick to detect RI doubtful.

These results bare relevance for ART scale-up programmes when substitution of stavudine with tenofovir is considered.

Presenting author email: gmsruik@hotmail.com

WEPE0087
Therapeutic drug monitoring (TDM) of different doses of atazanavir (ATV)/ ritonavir (RTV) when co-administered with the non-nucleoside reverse transcriptase inhibitors (NNRTIs) efavirenz or nevirapine

J. Toy1, C. Olatunbosun1, M. Harris2, S. Kanters3, C. Woods3, J. da Silva1, S. Guillemin1, P.K. Harrigan3, J. Montaner3
1St. Paul's Hospital, Providence Health Care, Pharmacy, Vancouver, Canada, 2St. Paul’s Hospital, Providence Health Care, Pharmacology, Vancouver, Canada, 3BC Centre for Excellence in HIV/AIDS, Vancouver, Canada

Background: Because efavirenz and nevirapine decrease atazanavir levels, the optimal dose of co-administered atazanavir/ritonavir is unclear. We examined steady-state atazanavir trough concentrations (Cmin) and associated factors in patients taking NNRTIs with various atazanavir/ritonavir doses.

Methods: HIV-positive adults who had TDM while taking an NNRTI and atazanavir/ritonavir were included. Dose groups were defined as: low dose atazanavir (100 mg twice daily, Cmin 40-60 µg/ml), medium dose atazanavir (200 mg twice daily, Cmin 80-120 µg/ml) and high dose atazanavir (300 mg twice daily, Cmin 120-150 µg/ml).

Results: There were 212 patients included in the study. The mean atazanavir Cmin and associated factors were: low dose 48.6 (±6.8) µg/ml, medium dose 94.4 (±30.9) µg/ml, high dose 140.4 (±77.5) µg/ml. Cmin significantly increased with increasing atazanavir doses (p<0.01).

Conclusion: This study demonstrated that low dose atazanavir/ritonavir may be used as first-line therapy when co-administered with NNRTIs. Higher atazanavir doses should be considered when NNRTIs are co-administered. Further studies are warranted to confirm these results.

Presenting author email: jtoy@chpnet.org

Pharmacology, pharmacokinetics, role of therapeutic drug monitoring, drug interactions
WEPE0087-WEPE1003

WEPE1003
Therapeutic drug monitoring (TDM) of different doses of atazanavir (ATV)/ ritonavir (RTV) when co-administered with the non-nucleoside reverse transcriptase inhibitors (NNRTIs) efavirenz or nevirapine

Abstract Book Volume 2 | www.aids2010.org
navir Cmin, atazanavir/ritonavir dose.

Results: Analysis included 170 samples from 119 subjects (96% male, median age 41 years, Range: 18-62), CD4+ 580 cells/µL (Q1=400-800, Q3=500-1200), 86% HIV-RNA < 50 copies/mL. Differences in atazanavir Cmin were seen across atazanavir/ritonavir doses with nevirapine but not efavirenz (Table). Probabilistic of achieving target atazanavir Cmin+150ng/mL was lower with nevirapine versus efavirenz for atazanavir 300mg/ritonavir 100mg only (63% vs. 100%, p<0.0001). In multi-analyte analysis, higher atazanavir Cmin was associated with atazanavir dose (adjusted relative risk [ARR], 1.61 for 400mg vs. 300mg) and HIV viral load interval (ARR, 1.31-1.94, p<0.0001) and ritonavir Cmin (ARR 1.07 per 10mg/mL increase; 95% CI, 1.05-1.09, p<0.0001).

Conclusions: Atazanavir/ritonavir doses with NNRTIs achieved target atazanavir Cmin; tenofovir was not associated with lower atazanavir Cmin. TDM and individualized dosing is recommended, particularly with nevirapine.

**WEPE0088**

**Pharmacovigilance (PV) for antiretroviral medicines in Ukraine: a step wise approach**

I. Pereiretsa, E. Matveeva, M. Diepera, S. N. Pale, G. Weilera, A. Bobrovb


**Issues:** Scale-up of treatment of HIV infection and adherence of patients to treatment is being challenged by the adverse events (AE) of ARV. Pharmacovigilance (PV) in HIV treatment, including detection, assessment, understanding and prevention of AE related to the use of ARV has been underutilized in HIV treatment in Ukraine - although a new PV system exists. The broad range of ARVs (genics and branded) used in Ukraine and prevalent co-morbid conditions and opportunistic infections in patients make PV an important tool for HIV treatment improvement.

**Description:** WHO and the State Pharmacological Centre (SPC) in Ukraine conducted an assessment of PV in HIV treatment. Since 2004, when ARV therapy was initiated in Ukraine, only 440 spontaneous reports of adverse drug reactions (ADR) caused by ARVs have been reported. Less than two percent of all patients on ART have experienced ADRs in 2009. For 14,000 patients on ART, 234 ADR reports were submitted by HIV specialists to the SPC.

Lessons learned: WHO and SPC were interested in the importance of ADRs reporting by HIV specialists, their low motivation, barriers to submit paper-based reports to the SPC. Lack of reciprocal communication between HIV SPC and SPC and low level of knowledge about challenges in HIV treatment among PV specialists were identified as main contributors to insufficient tracking and reporting of HIV treatment related ADR. There is a need to improve existing processes and identify many other methods for reporting ARDs.

**Next steps:** A number of measures were identified to improve PV for HIV treatment and contribute to strengthen systems: improve communication between services; develop appropriate communication materials; improve existing reporting tools and train specialists from both HIV and PV services on appropriate aspects of HIV treatment and PV. When resources will allow, passive reporting will be complemented by an active PV system.

Presenting author email: bobrovba@who.org.ua

**WEPE0089**

**Pharmacokinetic interaction study between TMC278, a next-generation non-nucleoside reverse transcriptase inhibitor (NNRTI), and methadone**

H. Craueli, R. van Heeswijk, A. Van devoorde, D. Mcneely, A. Buelens, H. Rhoetelmans

**Tihot Inc., Tihot Inc., 445 collingwood, *Tihot Inc., Tihot Inc., USA**

**Background:** TMC278 is a next-generation NNRTI with sustained efficacy and good tolerability through 96 weeks in ARV-naive HIV-infected patients (Poznai et al. AIDS 2010). The current trial evaluated the effect of TMC278 on methadone pharmacokinetics and pharmacodynamics.

**Methods:** This was an open-label, single-sequence, add-on drug-drug interaction study, qualifying patients were on stable methadone maintenance therapy. Volunteers received methadone (individualised maintenance dose, 50-250mg) for 12 hours through 13. TMC278 25mg was added from Day 1 through 11. All treatments were taken following breakfast. Pharmacokinetic profiles up to 24 hours were determined on Days -1 and 11 for R- and S-methadone, and on Day 11 for TMC278. Least square (LS) means ratios (test/reference) and associated 90%CI were calculated based on log-transformed pharmacokinetic parameters. The effect of TMC278 on methadone's pharmacodynamic parameters was determined with the use of chlorpromazine, which allows the assessment of withdrawal symptoms (Short Opiate Withdrawal Scale [SOWS], Desires for Drugs Questionnaire [DDQ], and pupillometry).

**Results:** When TMC278 25mg was added on 15mg/mL increase; 95% CI, 1.05-1.09, p<0.0001.

**Conclusions:** TMC278 was well tolerated and showed no drug interactions with methadone in ARV-naive patients. Co-administration of methadone and TMC278 was generally safe and well tolerated. No grade 3 or 4 adverse events (AEs) and no serious AEs were reported. There were no discontinuations due to AEs.

**Lessons learned:** No a-priori methadone dosage “stepping” is required when initiating co-administration with TMC278. Clinical monitoring for withdrawal symptoms is, however, recommended, as methadone maintenance therapy may need adjustment in some patients.
WEPE0092
Randomized trial comparing two nevirapine starting doses after switching from efavirenz due to side effects (the Venice/GESTA-A-Venice study)

E. Ribera1, J. Berenguéri1, A. Curro1, M. Montero1, V. Boix1, J.R. Santos2, M. Masià1, L. Giner3, H. Esterbényi3, J. González-García1
1Hospital Universitari Vall de Hebron, Barcelona, Spain, 2Hospital Universitario Gregorio Marañón, Madrid, Spain, 3Hospital Universitario La Paz, Madrid, Spain, 4Hospital General Universitario de Alicante, Alicante, Spain, 5Hospital General Universitario Germans Trias i Pujol, Badalona, Spain, 6Hospital General de Elche, Elche, Spain, 7Agencia Ensayos Clínicos GESIDA, Madrid, Spain

Background: To determine the appropriate starting dose of NVP in patients taking EFV switching to NVP due to CNS adverse events (AE)

Methods: Two-center, non-randomized trial. Patients were an EFV-based regi- men with CNS toxicity were offered to switch to NVP without changing the backbone. The control (C) arm received 200 mg QD for 2 weeks and 200 mg bid thereafter and the experimental (E) arm 200 mg bid from the first day. EFV and NVP plasma levels were determined at days 0, 3, 7, 14, 16, 20 and 99; blood tests were performed at each visit and AE recorded. Chi-squared and Fisher exact test were used for qualitative variables and t-test and Mann-Whitney U test for quantitative variables.

Results: 39 patients were included (20/6/19). CNS symptoms disappeared in 19/20 patients after EFV discontinuation. EFV plasma levels persisted detectable after 14 days without differences between arms. A much higher percentage of patients achieved NVP plasma levels >3 µg/mL during the first two weeks (89 vs 44% at day 7, p<0.006; 82 vs 32% at day 14, p<0.0003). All patients had undetectable viral load after 12 weeks on-treatment and 75% and 79% (p<0.05) by HTP. There was a trend to higher incidence of rash (5 vs 1) and hepatic toxicity (4 vs 1) in the E arm. Rash was related to NVP plasma levels at day 1 (6.3 vs 1.6 µg/mL in patients with or without rash, p<0.007). Liver toxicity was not related to plasma levels or HCV coinfection.

Conclusions: NVP is a good switch option for EFV due to CNS side effects. From the available data we recommend starting NVP with 200 mg bid, although a trend to higher NVP-related side effects with this dose was observed, rash being significantly related to NVP plasma levels.

Presenting author email: acuran@vhelenet.com

WEPE0093
Effect of moderate liver impairment on the multiple-dose pharmacokinetics of ritonavir-boostered saquinavir in HIV patients

L. Chang1, C. Kreuzer1, R. Farha1, M. Abr1, L. Baher2, P. Tebas1, C. Cooper3, M. Rodriguez-Torres3, L. Donatozzi3, J. Patel1
1Bichére Hospital, AP-HP, Internal Medicine Unit, Paris, France, 2INSERM 1018-CESP, University Paris 11, Le Kremlin Bicêtre Cedex, France, 3Bichére Hospital, AP-HP, Pharmacy, La Plaine Saint-Denis, France, 4Bichére Hospital, AP-HP, Paris, France, 5INSERM U936 TM, France, 6Bichére Hospital, AP-HP, Virology, Paris, France, 7ARDE Group, Bicêtre Hospital, AP-HP, Paris, France

Background: Saquinavir (SQV) is extensively metabolized in the liver by CYP3A4. Hepatic impairment is likely to affect SQV clearance by reducing liver blood flow and possibly by influencing CYP3A4 activity. The impact of moderate hepatic impairment on the steady-state pharmacokinetics (PK) of ritonavir (RTV)-boosted SQV was investigated.

Methods: In a multicenter, nonrandomized study enrolled treat- ment-experienced HIV-infected patients with moderate liver impairment (Group 2; Child-Pugh Grade B) and age, gender, weight, and tobacco-use matched controls (Group 1). Patients received SQV/RTV 1000/100 mg twice daily for 12 weeks. Plasma samples were drawn at days 0, 2 or 3 NRITs. Predose and predose postdose SQV and RTV plasma concentrations were measured on Day 14. Cmax, Cmin, Tmax, and AUC0-t were estimated using standard non-compartmental meth- ods. Geometric mean ratios (GMR) were used to compare AUC0-12 (ug•hr/mL) and Cmax (ug/mL) between treatment groups.

Results: Seven patients with moderate liver impairment (Child-Pugh score range, 7-9), all hepatitis C virus-infected, and seven controls were evaluable. SQV and RTV AUC0-12 was reduced approximately 25% and 25%, respectively, in patients with liver impairment. Unbound plasma protein fractions were similar between groups.

Sixteen patients (7 in Group 1 and 9 in Group 2) who received at least one dose of study medication were included in the safety analysis. No special safety concerns were indicated in HIV-infected patients with moderate liver disease.

Presenting author email: linda.chang@roche.com

WEPE0094
Virological response to atazanavir, ritonavir and tenofovir/emtricitabine: relation to individual pharmacokinetic parameters and adherence measured by medication event monitoring system (MEMS) in naive HIV-infected patients (ANRS134 trial)

C. Gouge1,2, A. Barrail-Tran2, X. Duval1, G. Nembot1, X. Panhard3, R. Savic1, D. Descamps1, B. Vrijens1, A.-M. Taburet4, P. Mentre1
1ANRS 134 Study Group
2Biocentre Hospital, AP-HP, Internal Medicine Unit, Paris, France, 3INSERM 1018-CESP, University Paris 11, Le Kremlin Bicêtre Cedex, France, 4Bichére Hospital, AP-HP, Pharmacy, La Plaine Saint-Denis, France

Background: Individual pharmacokinetic parameters and treatment adherence are key factors to reach fast and sustained virological response. Assessment of adherence by MEMS recording exact times of drug intakes allows quantification of drug exposure.

Methods: A prospective study was conducted in 35 naive patients. Atazanavi- vir (300 mg), ritonavir (100 mg), and tenofovir-emtricitabine were given once daily for 6 months. All doses were taken in the morning with a MEMS cap. Blood samples for pharmacokinetic analysis were drawn at week-4 (W4), then bimonthly. Atazanavir and ritonavir were assayed by HPLC (UV detect- ion), Compartmental pharmacokinetic parameters were calculated with a one compartment model, using MEMS records for dosing-history. Clinical and bio- logical data were collected at screening and monthly. Relationships between pharmacokinetic, adherence recorded with MEMS, pill counts and questionnaires, and immuno-virological outcome were determined.

Results: Median HIV viral load (VL) and CD4 count at inclusion were 23,200 copies/mL (range, 100-457,000) and 436 cells/µL (197-573). Median maxi- mal (Cmax) and trough concentrations (Ctrough) of atazanavir at W4 were 3,774 ng/mL (1,500-10,956), and 552 ng/mL (40-695). Median maximal plasma concentrations and adherence at W24 were 97% and 96% respectively. 88% of doses were taken on time (±3h). Median CD4 count at W24 was 480 cells/µL/3 patients had a detectable VL (47-152 cp/mL) at W24: four had initial VL >100,000 cp/mL but correct adherence and the last patient was poorly adherent de- spite low initial VL. Among the 30 virological responders, 5/6 with initial VL >100,000 cp/mL had optimal therapeutic exposure (based on concentrations/ adherence) versus 13/24 patients in whom VL was <100,000 cp/mL. One patient experienced a severe hyperbilirubinemia and one a transient cytolytic hepatitis. Pill counts and questionnaires were less likely to detect adherence failure than MEMS.

Conclusions: Adherence records by MEMS allow quantification of individual drug exposure and may explain immunovirological response taking into ac- count patient characteristics at treatment initiation.

Presenting author email: cecile.goujard@bct.aphp.fr

WEPE0095
Does smoking tobacco affect atazanavir exposure in HIV-infected individuals?

S. Guillen1, M. Hull, S. Kanters, M. Harris, D. Milan, V. Dias Lima, R. Harrigan, J. Montaner
1BC Centre for Excellence in HIV AIDS, Vancouver, Canada

Background: It has previously been reported that tobacco use may decrease plasma exposure to atazanavir (ATV), as measured by ATV trough levels (Ctr). We evaluated the association between smoking tobacco and ATV Ctr within a group of HIV infected adults undergoing routine ATV therapeutic drug monitoring (TDM).

Methods: Smoking history and baseline characteristics were recorded at the time that routine TDM was done to assess ATV Ctr among consenting HIV- infected individuals at an HIV primary care clinic in British Columbia, Canada. The median time from starting an ATV-containing regimen until TDM was 1.4 months (interquartile range [IQR] 1.0-3.5). Highly active antiretroviral therapy (HAART) history was obtained from the provincial centralized antiretroviral drug therapy registry. Factors related to ATV Ctr were assessed using the Wilcoxon Rank sum test and multivariate linear regression.

Results: We evaluated 416 patients (89% males) on ATV-containing HAART. Of these, 246 (59%) were smokers (S) and 170 (41%) non-smokers or ex- smokers (NS). Median age was 42 years (IQR 37-49) for smokers and 46 years (IQR 40-53) for NS (p< 0.0001). There were 262/416 (63%) patients who were treatment naive or were off treatment for < 12 months prior to starting an ATV-containing regimen (ATV starters). The rest switched from prior non-ATV HAART. No association was found between smoking history and ATV Ctr (p<0.05). In multivariate analysis there were no significant variables associated to ATV Ct and smoking history, including changes in CD4 cell count and VL.

Conclusions: Our results demonstrate that current tobacco smoking was not associated with ATV Ct in HIV-infected patients on ATV-based HAART.

Presenting author email: sguillen@cenet.ucb.ca
XVIII
International
AIDS Conference
| July 18-23
2010 |2008,
Vienna,
Austria
AIDS 2008
• XVII International
AIDS Conference
• 3-8 August
Mexico
City

WEPE0096

Altered plasma levels of nevirapine after
commencing rifampicin containing TB regimens in
Malawi
M. Chaponda1,2,3, W. Nyirenda2, V. Watson1, S. White3, J. van Oosterhout2,
D. Lalloo4, M. Pirmohamed1, R. Heyderman3, H. Mwandumba1, S. Khoo1
1
University of Liverpool, Pharmacology, Liverpool, United Kingdom,
2
University of Malawi, Medicine, Blantyre, Malawi, 3University of Malawi,
Malawi Liverpool Wellcome Trust, Blantyre, Malawi, 4University of Liverpool,
Liverpool School of Tropical Medicine, Liverpool, United Kingdom
Background: The reduction in nevirapine exposure by rifampicin is well
characterised in patients commencing antiretroviral therapy (ART). Conversely there are limited data on the impact of rifampicin on patients stable on
nevirapine containing ART who develop TB. In such patients, the national
treatment protocol for Malawi stipulates continuation of ART (without dosemodiﬁcation) in addition to rifampicin-containing TB treatment for 6 months.
A major concern is that rifampicin induces CYP450 enzymes leading to a reduction in nevirapine plasma levels.
Methods: We conducted a prospective cohort study in HIV-positive patients
stable on NVP containing ART (200mg twice daily, for at least 2 weeks) and
who started rifampicin-based TB treatment. To determine the effect of rifampicin on plasma nevirapine levels, a truncated nevirapine PK proﬁle (2ml of
blood taken at 0, 1, 2, 4, 8 hours post dose) was performed in 10 male and
10 female patients on day 0 and day 14 after commencing TB treatment. In
addition, a single trough level was measured on day 3 and 7 to determine how
rapidly nevirapine levels declined. Nevirapine levels were measured by LC-MS
at the University of Liverpool.
Results: Of the 20 patients, 2 had sub-therapeutic levels on day 0. Overall
By day 14, there was a 22% reduction in the geometric mean AUC of nevirapine. Six (30%) patients had sub therapeutic nevirapine levels at day 14.
This reduction occurred as early as day 3 with a progressive drop in geometric
mean concentration.
Conclusions: Our data show that there is a moderate decrease in plasma nevirapine levels when rifampicin is commenced in a patient stable on ART. More
research is required to determine the consequences on ART outcome and the
value of changing nevirapine to efavirenz during TB treatment or increasing
the nevirapine dosage temporarily.
Presenting author email: chaponda@liv.ac.uk

WEPE0097

The effect of lopinavir/ritonavir on the
pharmacokinetics of TMC207, an investigational
antimycobacterial agent
R. van Heeswijk1, A. Vandevoorde1, P. Meyvisch1, T. De Marez2,
K. De Beule1, D. Mc Neeley2, R. Hoetelmans1
1
Tibotec BVBA, Mechelen, Belgium, 2Tibotec Inc., Titusville, United States
Background: TMC207 is an ATP synthase inhibitor with activity against M.
tuberculosis. CYP3A has been shown to be the major enzyme involved in its
metabolism, resulting in the formation of the active N-monodesmethyl metabolite (M2). In this study the effect of CYP3A inhibition by lopinavir/ritonavir
(LPV/r) on the pharmacokinetics (PK) of TMC207 and M2 was explored.
Methods: An open-label, cross-over trial was conducted in 16 healthy subjects who received two treatments in a randomized order. In Treatment A,
subjects received a single dose of 400 mg TMC207. In Treatment B, subjects
received LPV/r 400/100 mg bid for 24 days, with co-administration of a single
dose of 400 mg TMC207 on Day 11. The two doses of TMC207 were separated
by 4 weeks. PK of TMC207 and M2 were measured over 14 days.
Results: Co-administration of LPV/r did not inﬂuence TMC207 Cmax but increased the AUC14d by 22%. The ratios of the Least Squares means (LSmeans)
and 90% conﬁdence interval (90% CI) of the TMC207 Cmax and AUC14d were
0.99 (0.88-1.12) and 1.22 (1.11-1.34), respectively. The M2 Cmax and AUC14d
were reduced by 51% and 41%, respectively, during co-administration of LPV/
r. The ratio of the LSmeans and 90% CI of the M2 Cmax and AUC14d was 0.49
(0.43-0.56) and 0.59 (0.52-0.67), respectively. The most frequently reported
AEs were diarrhea (7 subjects) and headache (4 subjects). All AEs were grade
1 or 2 severity, except for one grade 3 lipase increase after intake of TMC207
in Treatment A.
Conclusion: The observed changes in the exposure to TMC207 and M2 are
consistent with CYP3A inhibition by LPV/r. The clinical relevance of this interaction remains to be established after analysis of exposure-response relationships in ongoing clinical studies.
Presenting author email: rvheesw1@its.jnj.com

WEPE0098

P-glycoprotein expression on T lymphocytes
is down-regulated in HIV infection and do
not normalize on CD4+ T cells following viral
suppression with protease inhibitors
J. Morello, J.M. Benito, N.I. Rallón, M. López, L. Cuenca, G. González-Pardo,
V. Soriano, S. Rodríguez-Nóvoa
Hospital Carlos III, Madrid, Spain
Background: P-glycoprotein (P-gp) is an efﬂux membrane protein that limits
the bioavailability of drugs such as protease inhibitors (PI) by pumping them
out of cells. P-gp may also play a positive role by decreasing the replication
of enveloped viruses. Herein, we evaluate the inﬂuence of HIV infection, HCV
infection and PI in P-gp expression.
Methods: A total of 150 individuals were examined. They were split out in 4
groups: 35 healthy controls, 16 HCV-, 30 HIV+ ARV-naïve and 69 HIV+ pa-

tients on HAART for at least 6 months (27 atazanavir, 22 atazanavir/ritonavir
(r) and 20 darunavir/r). P-gp expression was measured using ﬂow cytometry
and it was reported as percentage of positive cells for P-gp after substracting
the value obtained in the isotypic control.
Results: Median age was 45 years, 72% were men. Median HIV-RNA was 3.8
log copies/mL in ARV-naïve patients and < 1.7 log copies/mL in patients on
HAART. HIV/HCV-coinfection was present in 21/69 patients on HAART.
P-gp expression was higher in NK, followed by CD8+ and CD4+ cells in all
subjects (p< 0.001). P-gp expression was signiﬁcantly lower in ARV-naïve
patients than in healthy controls in all cell subsets. There was no correlation between P-gp expression and HIV viral load. HCV infection did not affect signiﬁcantly P-gp expression. HAART increased P-gp expression in total
lymphocytes and CD8+ T-cells. HIV+ patients on HAART and healthy controls
had similar P-gp expression in all cell subsets except in CD4+ T-cells (6.8
[4.0-11.3] vs. 10.5 [8.7-16.9], p=0.002).
Conclusions: While HIV infection decreased P-gp expression, HAART restored
P-gp expression to normal values in all but CD4+ T-cells. The low expression
of P-gp in CD4+ T-cells in patients on HAART could have a negative effect in
the immune-virological control of HIV infection. However, this effect could be
mitigated by the enhanced accumulation of PIs inside these cells.
Presenting author email: judit_morello@yahoo.es

75

Wednesday
21 July
Poster
Exhibition

Thursday
22 July

Friday
23 July

WEPE0099

Preliminary evaluation of reproducibility and
accuracy for the extraction of LPV, RTV and NVP
for HIV-1 therapeutic drug monitoring (TDM) using
the solid matrix transport device (SampleTanker®)
L.J. Else , J. Tjia , D.J. Back , C. Loveday
1
University of Liverpool, Pharmacology and Therapeutics, Liverpool, United
Kingdom, 2ICVC Charitable Trust, Great Missenden, United Kingdom
1

1

1

2

Background: The collection, transport and storage of plasma required for
TDM/pharmacokinetic (PK) trials of antiretrovirals is expensive and can be a
barrier to study in limited resource settings. SampleTanker® (ST) is a biomatrix (originally developed for molecular/serological analysis) that holds ≤1ml
of dried plasma and does not require refrigeration, thereby cutting storage/
transport costs. This study is a preliminary evaluation of the utility of ST for
accurate and reproducible extraction/quantiﬁcation of LPV, RTV and NVP for
use in PK studies to support HIV care in the Developing Countries.
Methods: LPV, RTV and NVP were spiked into plasma, loaded (100µl) onto
the ST, dried overnight and resealed ready for processing. Different solvent
combinations were used to optimise drug extraction, and quantiﬁcation was
performed using HPLC-MS/MS. %recovery was compared against equivalent
plasma concentrations extracted using a validated protein-precipitation method. Calibration curves were then constructed, extracted using the optimal
method, and run on multiple occasions to determine inter-assay precision
(%CV) and accuracy (%bias). Clinical samples from HIV-infected patients receiving LPV, RTV and NVP were quantiﬁed from validated ST calibration curves
and compared with values derived from established methods.
Results: From 21 solvent combinations tested, tert-butyl methyl ether [3ml
TBME+50µl HCl] and methanol [3ml MeOH+50µl NH3] provided optimum
recovery of LPV(87%) and RTV(91%), and NVP(72%). Calibration curves
ranged between 168-14782ng/ml(LPV), 123-4889ng/ml(RTV) and 10310018ng/ml(NVP). Inter-assay variation was < 20%(at LLQ) and < 15% for
all other calibrator levels; %bias was < 11%. The concentration of drug extracted from patient samples using protein-precipitation and from ST was
highly correlated (r2>0.89); the %difference was < 16%(LPV), < 14%(RTV)
and < 13%(NVP).
Conclusions: In comparison to a validated protein precipitation technique
this preliminary study demonstrated the potential for accurate quantiﬁcation
of LPV, RTV and NVP from ST matrix and will consequently have utility for PK
studies.
Presenting author email: l.j.else@liv.ac.uk

Late
Breaker
Posters

Author
Index

WEPE0100

Cord blood and amniotic ﬂuid exposures of
protease inhibitors and viral load quantiﬁcation in
HIV-infected pregnant women
J. Ivanovic1, E. Nicastri1, M. Viscione1, R. Bellagamba1, F. Signore2,
G. Pisani2, A. Ammendola3, C. Vallone2, R. Fezza1, C. Tommasi1,
M. Tempestilli3, L. Pucillo3, P. Narciso1
1
’Lazzaro Spallanzani’ National Institute for Infectious Diseases, Clinical
Department, 4. Division, Rome, Italy, 2’San Camillo-Forlanini’ Hospital,
Gynaecology and Obstetrics, Rome, Italy, 3Lazzaro Spallanzani’ National
Institute for Infectious Diseases, Virologic Laboratory, Rome, Italy
Background: Antiretroviral combination therapies, including protease inhibitors (PI), are increasingly used in the prevention of vertical HIV-1 transmission. To determine pharmacokinetics, placental transfer and efﬁcacy of different PI in pregnancy we measured drug levels and viral load in different
compartments.
Methods: 40 pregnant women receiving ritonavir-boosted lopinavir (n=23),
nelﬁnavir (n= 7), atazanavir (n=6), fosanprenavir (n=2) and darunavir (n=2)
were enrolled. Maternal blood, paired cord blood and amniotic ﬂuid (AF) were
obtained at delivery. Drug concentrations and viral load (VL) in AF, maternal
and cord blood were performed.
Results: At delivery, mean CD4+ cell count was 512 ± 199 cells/mL with
undetectable VL (< 40cp HIV-RNA/ml), the mean BMI was 27.8 ± 5.1. The
mean cord to mother (C:M) ratio of nelﬁnavir, atazanavir, fosamprenavir
and darunavir was 0.42 (SD± 0.27), 0.18 (SD± 0.11), 0.21 (SD± 0.01) and
0.11(SD± 0.01) , respectively. The mean lopinavir level in the cord blood was
369.3 (SD±153.5) ng/mL. In 34 of 40 (85%) women the protease inhibitor
plasma concentrations were above cut-off values. Cord blood concentrations

75

Abstract
Book Volume
2 | www.aids2010.org
www.aids2008.org
• Abstract
Book Volume 1


WEPE0101
Darunavir/ritonavir (DRV/rtv) increases rosvuvastatin (RSV) concentrations but does not alter lipid-lowering effect in healthy volunteers

C. Fichtenbaum, D. Samineni, E. Moore, S. Sharma, L. Sallans, P. Desai University of Cincinnati, Cincinnati, United States

Background: Treatment of dyslipidemia in HIV-infected persons may be limited by drug-drug interactions between antiretroviral agents and HMG-CoA reductase inhibitors. We hypothesized that DRV/rtv increases the concentration of rosvuvastatin (RSV) when co-administered.

Methods: HIV-seronegative volunteers were randomized to receive RSV 10 mg or placebo before and after administration of DRV/rtv showed a significant increase (109 ± 161 ng/mL vs. 166 ± 162 ng/mL, P < 0.001) but the elimination half-life of RSV did not change. Ritonavir elimination half-life increased significantly (5.7 ± 2.1 h vs. 8.5 ± 1.7 h, P < 0.001). The Cmax in plasma of RSV before and after administration of DRV/rtv showed a significant increase (0.06-10.7). A validated LC/UV method with a dynamic range from 20-10,000ng/mL was used. Noncompartmental analysis (Winnonil 5.2) was used to generate PK parameters.

Results: Twelve subjects completed all PK visits. The geometric mean AUC0-24 of RSV showed a significant increase before and after administration of DRV/rtv showed a significant increase (109 ± 161 ng/mL vs. 166 ± 162 ng/mL, P < 0.001). In total, 12 samples were obtained over 24h from two dosing intervals (0-12h, 12-24h, with 400mg doses of RAL given at 0 and 12h). A validated LC/UV method with a dynamic range from 20-10,000ng/mL was used. Noncompartmental analysis (Winnonil 5.2) was used to generate PK parameters.

Conclusion: DRV/rtv significantly increased RSV AUC and Cmax without changing the elimination half-life. RSV did not significantly affect the PK of ritonavir: Lipid-lowering effects of RSV are not significantly altered in the presence of DRV/rtv despite higher concentrations of RSV.

Presenting author email: carl.fichtenbaum@uc.edu

Pharmacogenomics
WEPE0104-WEPE0107

Influence of CYP2B6 haplotype on plasma efavirenz and nevirapine levels when co-administered with ritampicin in HIV/TB co-infected Thai adults

S. Uttayongkul1, S. Mahasrimongkol1, S. Likansaksiri2, W. Manusuthir2, R. Chanthara2, T. Shioda2, S. Khumsiri3
1Mahidol University, Department of Microbiology and Immunology, Faculty of Tropical Medicine, Bangkok, Thailand, 2Bamrasnaradura Infectious Diseases Institute, Ministry of Public Health, Department of Disease Control, Nonthaburi, Thailand, 3Medical Genetics Section, National Institute of Health, Ministry of Public Health, Department of Medical Sciences, Nonthaburi, Thailand, 4Mahidol University, Department of Pathology, Faculty of Medicine, Ramathibodi Hospital, Bangkok, Thailand, 5Osaka University, Department of Viral Infection, Research Institute for Microbial Diseases, Osaka, Japan

Background: Cytochrome P450 2B6 (CYP2B6) metabolizes efavirenz and nevirapine, the major core antiretroviral drugs for HIV in Thailand. Haplotype of CYP2B6 was evidenced to be associated with single-dose-nevirapine, however, CYP2B6 haplotype in association with steady state plasma concentrations of non-nucleoside reverse transcriptase inhibitors (NNRTIs) in HIV/TB dual-infected patients has never been investigated.

Methods: We studied 122 ritampicin recipients with concurrent HIV/TB infection, receiving efavirenz (600 mg/day) (n=63) or nevirapine (400 mg/day) (n=59) based anti-retro viral therapy (ART). Five single nucleotide polymorphisms (SNPs) within CYP2B6: T3003C, G516T, A785G, 21563T were genotyped by real-time PCR. Plasma drug concentrations were measured by high performance liquid chromatography. The most significant haplotype tests for each drug were performed at 2 time points: basal and 12 weeks after ART initiation. Measurements were compared using Student’s t-test. All SNPs were in Hardy-Weinberg equilibrium.

Results: The TTGTC-TCTGC haplotype (g.3003T, 5167T, 785G, 18492T) was associated with lower plasma efavirenz and nevirapine levels and was more frequent in patients with lower ART-experienced subjects and healthy volunteers. As observed in other populations, the concentration of RAL in PA patients was variable despite overall early virologic response to therapy. The variability in C12h concentrations here is comparable to the reported inter-subject CVs (212%) in other populations. These results suggest no influence of race on PK parameters.

WEPE0103
Raltegravir pharmacokinetics (PK) in treatment naïve patients is not influenced by race: PK results from the early therapy in African-Americans (AA) living with HIV (REAL) study

1The University of North Carolina, Division of Infectious Diseases, Chapel Hill, United States, 2The University of North Carolina, Department of Pharmacology, Chapel Hill, United States

Background: In previous studies of Raltegravir (RAL), largely conducted among HIV-uninfected and ART-experienced, non-AA patients considerable variability in RAL PK and lack of a clear correlation between plasma concentrations and virologic response were observed.

Methods: REAL is a single arm, 105 week study of 40, ART-naïve AA patients administered RAL 400 mg BID plus TDF/FTC daily. Intensive 24h RAL PK is performed at week 4. Data on the first 25 subjects are presented. For each visit, 12 samples were obtained over 24h, from two dosing intervals (0-12h, and 12-24h, with 400mg doses of RAL given at 0 and 12h). A validated LC/UV method with a dynamic range from 25-10,000ng/mL was used. Noncompartmental analysis (Winnonil 5.2) was used to generate PK parameters.

Results: Mean age=38y, CD4=313±UL. PK parameters are compared to PK data included in the package insert.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>C12h (1st dose)</th>
<th>C12h (2nd dose)</th>
<th>Tmax</th>
<th>T1/2 (h)</th>
<th>4hUCP-12h (ng/hr/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geometric Mean</td>
<td>114 166</td>
<td>1,315</td>
<td>3</td>
<td>3</td>
<td>5,199</td>
</tr>
<tr>
<td>Range</td>
<td>0 - 1,386</td>
<td>0 - 967</td>
<td>196 - 10,092</td>
<td>8 - 1</td>
<td>24</td>
</tr>
</tbody>
</table>

(Week 4 PK)

Conclusions: In this study, the largest cohort of ART HIV-infected AA patients with intensive RAL PK available, PK parameters were similar to those previously reported from racially diverse other ART-experienced subjects and healthy volunteers. As observed in other populations, the concentration of RAL in patients was variable despite overall early virologic response to therapy. The variability in C12h concentrations here is comparable to the reported inter-subject CVs (212%) in other populations. These results suggest no influence of race on RAL PK.
Polish population is similar as in other Eastern European countries according to HLA-B*5701 allele occurs in 3.55% frequency. Presence of HLA-B*5701 in patients protected in PCR-SSP high resolution test; one patient carried HLA-B*5714 allele. With PCR-SBT method, the rest of them with PCR-SSP method. Fourteen out of 23 patients were genotyped, before ABC initiation, highly significantly reduces a risk of developing AHSR. In accordance with European AIDS Clinical Society’s guidelines Molecular Diagnostics Laboratory has been testing towards HLA-B*5701 since 2008.

Results: Blood samples were taken from HIV-infected patients before ABC-containing therapy was initiated or during first visit. Genomic DNA was isolated from the whole blood by spin column method. Next, DNA was amplified by PCR according to manufacturers’ protocols (Inno-Train PCR-SSP, Olerup PCR-SBT). After PCR, PCR products were analyzed in agarose gel electrophoresis (PCR-SSP) or sequenced in ABI Avant 3100 (PCR-SBT).

Methods: Until now 366 patients have been tested for HLA-B*5701 presence with PCR-SSP, Atria Genetics). Finally, PCR products were analyzed in agarose gel electrophoresis (PCR-SSP) or sequenced in ABI Avant 3100 (PCR-SBT).

Results: Uniln now 366 patients have been tested for HLA-B*5701 presence - 277 (75.6%) males and 89 (24.4%) females. Twenty of patients were tested with PCR-SBT method, the rest of them with PCR-SSP method. Fourteen out of 366 (3.8%) patients were selected for high resolution testing. Among ABC treated patients, 13 of 14 cases the HLA-B*5701 allele was detected in PCR-SSP high resolution test; one patient carried HLA-B*5714 allele. Among HLA-B*5701 positive patients there were 12 men.

Conclusions: Obtained data shows that among Polish HIV-infected patients HLA-B*5701 allele occurs in 3.55% frequency. Presence of HLA-B*5701 in Polish population is similar as in other Eastern European countries according to data collected in Allele Frequencies database (www.allelefrequencies.net).

WEPE0105
Genetic detection of HLA-B*5701 allele among HIV-positive patients in Poland
D. Zabei1, T. Dyda1, G.P. Stanczaki2, J.J. Stanczaki3, A. Horban1
1Hematology and Infectious Diseases, Molecular Diagnostics Laboratory, Warsaw, Poland; 2Hospital for Infectious Diseases, Warsaw, Poland

Background: Abacavir (ABC) is a potent nucleoside reverse transcriptase inhibitor used in combined antiretroviral therapy (CART) of HIV-positive patients. However, 5 to 8% patients manifests hypersensitivity reactions (AHSR) during 6 weeks after therapy initiation. AHSR can be fatal if therapy with ABC is continued or ABC is restarted. There is an association between AHSR occurrence and a carriage of the major histocompatibility complex class I allele HLA-B*5701. Genetic screening, before ABC initiation, highly significantly reduces a risk of developing AHSR. In accordance with European AIDS Clinical Society’s guidelines Molecular Diagnostics Laboratory has been testing towards HLA-B*5701 since 2008.

Methods: Blood samples were taken from HIV-infected patients before ABC-containing therapy was initiated or during first visit. Genomic DNA was isolated from the whole blood by spin column method. Next, DNA was amplified by PCR according to manufacturers’ protocols (Inno-Train PCR-SSP, Olerup PCR-SBT). After PCR, PCR products were analyzed in agarose gel electrophoresis (PCR-SSP) or sequenced in ABI Avant 3100 (PCR-SBT).

Results: Until now 366 patients have been tested for HLA-B*5701 presence - 277 (75.6%) males and 89 (24.4%) females. Twenty of patients were tested with PCR-SBT method, the rest of them with PCR-SSP method. Fourteen out of 366 (3.8%) patients were selected for high resolution testing. Among ABC treated patients, 13 of 14 cases the HLA-B*5701 allele was detected in PCR-SSP high resolution test; one patient carried HLA-B*5714 allele. Among HLA-B*5701 positive patients there were 12 men.

Conclusions: Obtained data shows that among Polish HIV-infected patients HLA-B*5701 allele occurs in 3.55% frequency. Presence of HLA-B*5701 in Polish population is similar as in other Eastern European countries according to data collected in Allele Frequencies database (www.allelefrequencies.net).

WEPE0106
ELISpot responses towards abacavir in HLA-B*5701 positive and negative HIV-infected patients
S. Esser, F.M. Heinemann1, S. Reuter2, H. Jäger1, A. von Krosigk1, R. Jablonka1, P.A. Horn1, M. Lindemann1
1University of Duisburg Essen, Department of Dermatology, Essen, Germany, 2University Hospital Essen, Institute for Transfusion Medicine, Essen, Germany

Background: Abacavir (ABC) causes a potentially fatal hypersensitivity reaction (HSR) in 5-8% of HIV-infected patients. HLA-B*5701 testing became available as a predictive test to avoid HSR. But individual cases with ABC-HSR are observed even in HLA-B*5701 negative patients. A safe diagnostic tool to confirm ABC-HER is mandatory. Therefore, we evaluated an ELISpot method to measure cellular immunity towards ABC.

Methods: ABC-ELISpot was performed in 79 HIV-infected patients (Figure) with clinically diagnosed ABC-HER (either patch test confirmed or suspected). Patients prior to ABC treatment, either HLA-B*5701 positive or negative, were included as controls. Fourteen patients were female; the average CD4 T cell count was 450/ml (range 15-1143). Peripheral blood mononuclear cells were stimulated by 10 µg/mL of abacavir sulphate in 200 µL of cell culture medium. Following pronocidation for 2 days, the cells were incubated in ELISpot plates for 2 further days and the number of interferon-gamma producing cells was measured.

Results: ABC treated patients with HSR (patch test confirmed or suspected) vs. without HSR displayed significantly higher numbers of ABC-specific cells (25.5±14.6 vs. 4.2±2.0 vs. -0.24±0.4 spots increment, P< 0.01 each). All patients with patch test confirmed ABC-HER were HLA-B*5701 positive whereas all with suspected ABC-HER were negative. The patients with suspected ABC-HER displayed reactions similar to those which are HLA-B*5701 positive but have never been treated with ABC.

Conclusion: The data indicate that ABC-ELISpot is a safe diagnostic tool to confirm HSR. The presence of HLA-B*5701 per se (irrespective of ABC treatment) leads to increased ELISpot reactions.

Presenting author email: sumonmal@health.moph.go.th
Lipodystrophy and metabolic abnormalities

WEPE0108-WEPE0120

WEPE0108 Lipodystrophy and inflammation predict grip strength in HIV-infected men: the MACS body composition study

K. Crawford1, X. Li2, X. Xu3, A. Abraham4, A. Dobs5, J. Margolick6

1Johns Hopkins University School of Medicine, Clinical Pharmacology, Baltimore, United States, 2Johns Hopkins University School of Medicine, Baltimore, United States, 3Johns Hopkins Bloomberg School of Public Health, Baltimore, United States, 4Northwestern University School of Medicine, Chicago, United States, 5University of Pittsburgh, Pittsburgh, United States, 6UCCLA Geffen School of Medicine, Los Angeles, United States

Background: In geriatric populations, grip strength is a sensitive indicator of physical function that declines with lower lean body mass (LBM) and increased systemic inflammation. Among HIV+ persons, the relationship between inflammation and grip strength has not been described.

Methods: Between 1999 and 2002, HIV+ men with clinical evidence of mixed lipodystrophy (LPO+, n=33) or without lipodystrophy (LPO-, n=23), and 33 HIV- men were recruited from the Multicenter AIDS Cohort Study. Visceral adipose tissue (VAT) was assessed by quantitative CT, and LBM and extremity fat were measured by DEXA. Insulin resistance was estimated by HOMA-IR.

Results: Between 1999 and 2002, HIV+ men with clinical evidence of mixed lipodystrophy (LPO+, n=33) or without lipodystrophy (LPO-, n=23), and 33 HIV- men were recruited from the Multicenter AIDS Cohort Study. Visceral adipose tissue (VAT) was assessed by quantitative CT, and LBM and extremity fat were measured by DEXA. Insulin resistance was estimated by HOMA-IR. Sixteen of 33 (48%) HIV+ subjects had undetectable VL and were on ART. At the Body Composition Substudy visit, VAT, visceral adiposity and insulin resistance were similar among the two groups, but the LPO+ group had higher mean VAT and insulin resistance. In the TDF/FTC group, the mean VAT was 10.6 kg/m^2 (p<0.001). Comparing TDF/FTC vs. ABC/3TC, at W12 improvements were statistically significant for TC (p<0.001), LDL cholesterol (p=0.005), but not for triglycerides (X2 =193.4, p≤.001) and 55% neuropathies- (X2 =115.0, p≤.001); 62% fatigue- (X2 =141.3, p≤.001); 38% nausea- (X2 =191.4, p≤.001) and 55% neuropathies- (X2 =401.4, p≤.001). Treatment arm p-value

Conclusions: Systemic inflammation, LBM, and the presence of mixed lipodystrophy are independently and associated with grip strength measured 5-8 years later. The mechanisms mediating the relationship between lipodystrophy and grip strength deserve further investigation.

Pretending author email: kwcrawford1@gmail.com

WEPE0109 Lipodystrophy-related symptoms (LS) and perceived body distress (PBD) in HIV-positive individuals over three months

D. Wardant1, K. Kirksey1, I. Corless1, Y. Cucu1, A. Weibel1, J. Voss2, W. Holzheimer1, M. Rivero1, C. Portillo1, P. Nicholas1, T. Lindgren1, M.J. Harrington2, S. Human1, S. Williard1, E. Sentir1, S. Rosen1, S. Moezzi1, E. Huang2, L. Robinson3, J. Arudo4, M. Maryland5, C. Bain4, C. Cleveland6, M. Witt6, T. Brown7, K. Crawford1, X. Li2, X. Xu2, A. Abraham4, A. Dobs5, J. Margolick6

1Columbia University, School of Nursing, New York City, United States, 2SETON Family of Hospitals, Austin, United States, 3MGH Institute of Health Professions, Boston, United States, 4University of California, School of Nursing, San Francisco, United States, 5Case Western Reserve University, Cleveland, United States, 6University of Washington, School of Nursing, Seattle, United States, 7Rutgers University, College of Nursing, Newark, United States, 8University of Puerto Rico, San Juan, Puerto Rico, 9University of California, San Francisco, School of Nursing, San Francisco, United States, 10Texas A&M University - Corpus Christi, Corpus Christi, United States, 11University of South Africa, Pretoria, South Africa, 12Elizabeth Glaser Pediatric AIDS Foundation, Washington DC, United States, 13Universidad del Turabo, Gurabo, Puerto Rico, 14University of Utah, Salt Lake City, United States, 15University of San Diego, San Diego, United States, 16Aga Khan University, Nairobi, Kenya, 17University of Illinois at Chicago, Chicago, United States, 18University of North Carolina at Wilmington, Wilmington, United States

Issues: HIV-related, fat distribution body changes for those taking ART are frequently reported. Prior cross-sectional research demonstrated that many individuals can reduce symptom frequency and lipodystrophy-related distress. This 137-person sub-analysis from an international, longitudinal RCT (n=775) evaluated associations of lipodystrophy symptoms with anxiety, depression, diarrhea, fatigue, nausea, and neuropathy, and differences in PBD between groups with varying numbers of reported symptom over time.

Description: Using parametric and nonparametric repeated-measures statistics, we analyzed self-reported demographics, LS-related symptoms (Symptom Checklist for HIV SSC-HIV rev) and PBD ratings (AACTG body distress scale). Baseline LS occurrences for stomach area weight gain, skinny arms/legs, back/belly, and shoulders before and after ART were assessed for incremental differences in change over time in PBD.

Results: This 53%-male, 38%-female, 48%-transgender-cohort related to group (PBD score differences (X2 =39.1, p=0.001) with trajectories differences between the no-symptom group-(NS), three-symptom group-(3S), and six-symptom group-(6S) that varied over time (X2 =39.1, p=0.001).

Conclusions: Future studies should examine relationships of LS-PBD and PBD-NS and investigate treatment of LS-PBD in HIV-positive patients.
WEPE0112
Metabolic abnormalities in protease inhibitors-treated HIV-infected children and adolescents

M. M. Meresescu1, G. Jugelete2, M. Luminoi3, M. Mardarescu4, S. Petrai5
1National Institute for Infectious Diseases ‘Prof Dr. Matei Bals’, Pediatric Infectious Diseases, Bucharest, Romania, 2National Institute of Infectious Diseases ‘Prof. Dr. Matei Bals’, Pediatric HIV Department, Bucharest, Romania

Background: There are over 16.000 HIV-infected children registered and Roumanian Public Health Ministry. Approximate 85% of them are treated with antiretroviral therapy (ART). 30% of children treated with ART. Objectives: To evaluate metabolic abnormalities in HIV-infected children treated with protease inhibitors (PIs). Methods: In our clinic we have registered over 1000 HIV-infected children. 50% of them are treated with antiretroviral drugs. Approximate 95% from HIV-infected children, have three antiretroviral drugs (HAART). We have monitored clinical and laboratory 130 HIV infected children, with various stages of disease (25-49, 13-91, 17-82, 25-83, 12-17, 18-22, and 25-35), ages between 9 -18 years old, for 12 months. All patients were treated with two reverse transcriptase inhibitors (RTIs) plus one PI or one boosted PI (32 patients - Nelfinavir, 47 patients - Lopinavir/ritonavir, 24 - Saquinavir/ritonavir, 12- Fosamprenavir/ritonavir and 15 patients - Atazanavir/ritonavir). We monitored serially parameters at week 48 in treatment-experienced patients. Results: After 12 months of treatment we noticed the following changes in lipid metabolism: HDL (calculated)≥130mg/dL (3.36mmol/L), Triglycerides ≥150mg/dL (1.69mmol/L), Total cholesterol ≥200mg/dL (5.17mmol/L) and LDL (calculated) ≥130mg/dL (3.36mmol/L). Background: In the first prospective comparison of DRV/r versus ATV/r suggest similar changes in TG levels over 12 weeks. Both arms saw modest changes in lipids and inflammatory markers, and insulin sensitivity. Changes from baseline were similar between arms; somewhat larger changes in TC and apoA1 with ART were likely to lower baseline values in the arm. Antiretroviral therapy may, therefore, improve inflammation and lipids over the short term and support the ‘return to health’ phenomenon observed in other studies.

Presenting author email: judith.aber@med.nyu.edu

WEPE0113
High prevalence of facial lipohypertrophy in HIV-infected patients treated with antiretroviral therapy in France

P. Leckener1, C. Gougard2, F.-A. Albert, M. L’Henaëff, S. Carrelt, J. Thévenon, G. Paus3
1Hôpital de Grenoble, Grenoble, France, 2Hôpital de la Kremel Bicêtre, Paris, France, 3Hôpital de Dijon, Dijon, France, 4TRT-5, Paris, France, 5Abbott France, Rungis, France, 6Hôpital Tenon, Paris, France

Background: Few data report the prevalence of lipodystrophy (LD), and in particular of facial lipodystrophy (FLD), in HIV infected patients treated with long-term combined antiretroviral therapy (cART).

Methods: We conducted a French, multicenter, cross-sectional, observational study in HIV-infected patients treated with cART for ≥12 months. The main objective was to assess the prevalence of FL. Patient socio demographic, HIV and ART history, CD4 and viral load (VL) levels were collected. Presence of LA and LD signs, type, severity and if applicable treatment to repair the buffalo hump due to the lack of necessity of hospital admission and the limited number of side effects, while accompanied by an improvement in the quality of life for these patients.

Presenting author email: medalanimerescu@gmail.com

WEPE0114
Treatment of cervical lipohypertrophy “buffalo hump” by ultrasonic liposuction

J. Puig1, M. Medina1, V. Gonzalez-Mestre2, C. Estany3, B. Clotet1, E. Negredo4
1Germans Trias i Pujol University Hospital, Lluita contra la SIDA Foundation, Badalona, Spain, 2Germans Trias i Pujol University Hospital, Plastic Surgery Department, Badalona, Spain

Background: Central lipohypertrophy in antiretroviral-treated patients is mainly characterized by an increased abdominal fat, breast enlargement and / or fat accumulation located in the anterior cervical area (buffalo hump). This last localization can be associated with neck pain, difficult to remain seated, dishinness and is also a stigmatizing sign of HIV infection.

Methods: We describe the efficacy and safety of ultrasonic liposuction to repair buffalo hump in 26 patients with severe cervical lipohypertrophy who were attended in our Unit from November 2002 to June 2008. Cervical photographs and a questionnaire, as well as epidemiological, clinical (time on HIV infection, severity of lipohypertrophy, ability of fat extraction and complications) and psychological items (patient’s satisfaction using a scale: "no satisfied", "satisfied" and "very satisfied") were collected at baseline, 24 and 48 weeks.

Results: We included 26 patients (22 men and 4 women); the mean (±SD) age was 42(±2.7) years; mean time since the HIV diagnosis was 18.2 ±1.2 years and time with HAART was 9.1 ±1.1 years (±1.1). The mean fat extracted with liposuction was 138.7milliliters (±32.7). The most common side effects post liposuction were: hemotoma (70.8 %) and local edema (80.9%). After 48 weeks, no patients presented serious adverse events (infections or necrosis); only one patient required re-intervention due to the recurrence of cervical fat accumulation at week 42. Most of patients (91.6%) were "satisfied" or "very satisfied" with results.

Discussion: The ultrasonic liposuction can be considered an efficient treatment to repair the buffalo hump due to the lack of necessity of hospital admission and the limited number of side effects, while accompanied by an improvement in the quality of life for these patients.

Presenting author email: enegredo@fluvida.org

Lipid-related laboratory abnormality

<table>
<thead>
<tr>
<th>Lipid-related abnormality</th>
<th>Baseline*</th>
<th>Week 48*</th>
<th>Median change‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipid-related abnormality</td>
<td>(mmol/L)</td>
<td>(mmol/L)</td>
<td>(mmol/L)</td>
</tr>
<tr>
<td>Triglycerides ≥150mg/dL</td>
<td>133 (1.50)</td>
<td>142 (1.60)</td>
<td>+2.74 (0.05)</td>
</tr>
<tr>
<td>Total cholesterol ≥200mg/dL</td>
<td>178 (4.60)</td>
<td>182 (4.71)</td>
<td>+2.65 (0.07)</td>
</tr>
<tr>
<td>LDL (calculated) ≥130mg/dL</td>
<td>101 [2.61]</td>
<td>108 [2.79]</td>
<td>+7 [0.08]</td>
</tr>
<tr>
<td>HDL ≤40mg/dL</td>
<td>53 (1.66)</td>
<td>68 (1.72)</td>
<td>-0.96 (0.08)</td>
</tr>
</tbody>
</table>

Table 1: Lipid-related abnormalities.

Conclusions: Prevalence of facial LA in HIV patients treated for more than 1 year is high, with more than half of patients in this cohort affected.

Presenting author email: pidecor@fhv-grunebne.A
WEPE0116
Metabolic syndrome in HIV-infected patients: prevalence and predictors after three years of antiretroviral therapy

1University Hospital Nantes, Infectious Diseases Department, Nantes, France, 2University Hospital Nantes, Biometry Department, Nantes, France, 3University of Pharmacy, EA 4275, Nantes, France, 4Hospital, Internal Medicine, La Roche sur Yon, France, 5CHR, Infectious Diseases Department, Paris, France, 6Bichat University, Infectious Diseases Department, Paris, France, 7CHR, Infectious Diseases Department, Orleans, France, 8University of Pharmacy, EA 4275, Nantes, France

Objective: We studied prevalence and risk factors for metabolic syndrome (MS) in HIV-infected patients started on antiretroviral therapy (ART) after 2007.

Methods: A prospective, multicenter, cohort study evaluated prevalence, biological and clinical components of MS in 269 patients who had received cART for more than 6 months up to June 2007. MS was defined according to NCEP-ATPIII 2005 criteria. Cross-sectional assessment included clinical examination, fasting evaluation of metabolic, inflammatory and oxidative parameters. Data were analyzed with khi-2, Student or Wilcoxon tests. Multivariate analysis was performed using logistic regression model.

Results: Characteristics of the study population were as follow: 33% female, 68% Caucasian ethnicity; mean age: 43 years, mean duration of HIV infection: 4.7 years. The prevalence of MS, after a median of 29.8 months of ART, was 18.2%. MS was associated with age (<p = 0.0001) and alcohol consumption (<p = 0.004). Duration of HIV-1 infection, nadir or current CD4 counts and current viral load did not differ between patients with and without MS. Table shows factors associated with MS in the final multivariable model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>95% CI</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (per year older)</td>
<td>1.06</td>
<td>1.02-1.09</td>
<td>0.0009</td>
</tr>
<tr>
<td>Absence of HIV co-infection</td>
<td>0.27</td>
<td>0.07-0.96</td>
<td>0.043</td>
</tr>
<tr>
<td>ABC cumulative exposure (per additional month)</td>
<td>1.03</td>
<td>1.00-1.05</td>
<td>0.060</td>
</tr>
<tr>
<td>PI cumulative exposure (per additional month)</td>
<td>1.03</td>
<td>1.00-1.05</td>
<td>0.041</td>
</tr>
<tr>
<td>Non HDL cholesterol (per mmol/L higher)</td>
<td>1.89</td>
<td>1.41-2.55</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

Conclusion: In this cohort of patients exposed to less than 4 years of ART, MS prevalence was comparable to previous series. Older age, HIV co-infection, elevated non HDL cholesterol and longer exposure to PI were risk factors for the MS. There was a non-significant trend towards increased risk of MS with cumulative ABC exposure.

WEPE0117
Cumulative prevalence and risk factors of lipodystrophy in a cohort of patients on antiretroviral therapy at Lighthouse, Malawi

T. Chaweza1, G. Garette1, S. Phiri1, L. Gabriel1, H. Mulinde1, P. Mwamba1, A. Fiton1, H. Taya2,3
1Lighthouse Trust, Lilongwe, Malawi, 2The International Union against Tuberculosis and Lung Disease, Paris, France

Background: Stavudine (d4T)- based antiretroviral regimens are widely used in resource-limited countries such as Malawi, where a generic fixed dose combination of d4T 30mg/3TC/NVP is the first line treatment. We examined the frequency of diagnosing lipodystrophy and its components among adult patients on stavudine and non-PI based regimens in the Lighthouse Trust, Lilongwe, Malawi.

Methods: By completing a standardized electronic checklist at each ART visit health workers check for common general signs and symptoms including CD4 count, viral load based on their own clinical judgement. At each checkup, all patients are given an opportunity to provide their complete medical history. A complete physical examination followed by a metabolic profile is performed. The physical examination includes an anthropometry, a clinical examination, and blood chemistry tests (including CD4 count, viral load, cholesterol, HDL, triglycerides, lipoprotein (a), and leptin). This list was considered in the study. We compared these findings with those of HIV patients undergoing HAART, recruited in a tertiary care hospital - INBIMB, Bucharest, Romania.

Results: Up to date we have 105 patients characterized by: median age of 31 years, mode age of 20 years; 59% men; 75% multiexperience, 80% receiving a protease inhibitor (PI) at least in the past 6 months; median CD4 cell count 454/mm3; and HIV viral load undetectable in 79% of cases. The prevalence of metabolic syndrome was 14.3%. Men were 5 times more exposed to these metabolic disturbances than women (p<0.03; OR=5.29, 95%CI=1.1-25.5 in multivariate analysis). Insulin-resistance was found in 62.6% according to HOMA score, with no gender difference. Among adipocytokines associated to insulin-resistance, leptin had pathologically low levels in 49.5% of cases, 2.5-times more frequently in men than in women. We included in the analysis 33% female, 68% Caucasian ethnicity; mean age: 43 years, mean duration of HIV infection: 4.7 years. The prevalence of MS, after a median of 29.8 months of ART, was 18.2%. MS was associated with age (<p = 0.0001) and alcohol consumption (<p = 0.004). Duration of HIV-1 infection, nadir or current CD4 counts and current viral load did not differ between patients with and without MS. Table shows factors associated with MS in the final multivariable model.

Conclusion: In this cohort of patients exposed to less than 4 years of ART, MS prevalence was comparable to previous series. Older age, HIV co-infection, elevated non HDL cholesterol and longer exposure to PI were risk factors for the MS. There was a non-significant trend towards increased risk of MS with cumulative ABC exposure.

WEPE0118
Metabolic syndrome and insulin-resistance in HIV-infected young Romanian population

B. Mihalescu1, V. Arama1,2, A. Streinu-Cerclel1, S.S. Arama1, C. Tlisic1, D. Ioni1, D.I. Munteanu1, A.M. Tudor1, C. Costinescu1, M. Lazar1, B. Manu1, A. Hitea1, M. Radulescu1, I. Otana1, L. Chiu1, C. Costoi1
1National Institute of Infectious Diseases ‘Prof. Dr. Matei Balș’ (INBIMB), Bucharest, Romania, 2University of Medicine and Pharmacy ‘Carol Davila’, Bucharest, Romania

Background: In Romania, HIV-infected population is made mainly of young adults, parenterally infected in their childhood, before 1990 and multiexperience afterwards. Our aim is the prevalence of metabolic syndrome and of insulin-resistance in experienced HIV-infected young adults undergoing HAART, a population with few data in literature.

Methods: We present the preliminary results of an ongoing prospective multi-disciplinary Romanian research grant (PNCDI2 no.62077/2008) on HIV-infected patients undergoing HAART, recruited in a tertiary care hospital - INBIMB, during 12 months. Patients were monitored semiestually on clinical, anthropometric, ultrasound and laboratory grounds (including glucose, hemoglobin A1C, insulinemia, C peptide, preinsulin, lipodogram, leptin, adiponectin, resistin). Metabolic syndrome according to International Diabetes Federation includes disturbances of body mass index/central obesity, triglycerids, HDL cholesterol, glycemia, blood pressure. Insulin-resistance involves a high HOMA score, where HOMA (insulina (mU/mL) x glycemia (mmol/L)) / 405. Results: Up to date we have 105 patients characterized by: median age of 31 years, mode age of 20 years; 59% men; 75% multiexperience, 80% receiving a protease inhibitor (PI) at least in the past 6 months; median CD4 cell count 454/mm3; and HIV viral load undetectable in 79% of cases. The prevalence of metabolic syndrome was 14.3%. Men were 5 times more exposed to these metabolic disturbances than women (p<0.03; OR=5.29, 95%CI=1.1-25.5 in multivariate analysis). Insulin-resistance was found in 62.6% according to HOMA score, with no gender difference. Among adipocytokines associated to insulin-resistance, leptin had pathologically low levels in 49.5% of cases, 2.5-times more frequently in men than in women. We included in the analysis 33% female, 68% Caucasian ethnicity; mean age: 43 years, mean duration of HIV infection: 4.7 years. The prevalence of MS, after a median of 29.8 months of ART, was 18.2%. MS was associated with age (<p = 0.0001) and alcohol consumption (<p = 0.004). Duration of HIV-1 infection, nadir or current CD4 counts and current viral load did not differ between patients with and without MS. Table shows factors associated with MS in the final multivariable model.

Conclusion: In this cohort of patients exposed to less than 4 years of ART, MS prevalence was comparable to previous series. Older age, HIV co-infection, elevated non HDL cholesterol and longer exposure to PI were risk factors for the MS. There was a non-significant trend towards increased risk of MS with cumulative ABC exposure.

Abstract Book Volume 2 | www.aids2010.org
Cardiovascular disease and other end organ damage
WEPE0121-WEPE0135

WEPE0121
Abacavir use and cardiovascular disease events: a meta-analysis of published and unpublished data
M. Cruciani1, V. Zanichelli2, G. Serpioni2, D. Bosco1, R. Mazzi3, S.G. Parisi4
1HIV Center, Verona, Italy, 2University of Padua, Padua, Italy

Background: The use of abacavir (ABC) has been associated with an increased risk of cardiovascular disease within the setting of cohort studies and of a randomized trial (RCT). However, no excess risk of myocardial infarction with ABC has been observed in others RCTs and in the aggregated clinical trials database maintained by the manufacturer of ABC. The principal aim of this study is to combine all the evidence from RCTs by means of meta-analysis to estimate the effect of combined antiretroviral therapy (cART) containing ABC on major cardiovascular event.

Methods: A comprehensive search of the available literature was carried out. Information about unpublished trials was attempted by contacting drug manufacturers. Data extracted included: any cardiovascular events and overall mortality. We used a conventional Mantel-Haenszel method, with odds ratio (OR) and 95% confidence intervals (CI) or, in the presence of heterogeneity, a random-effect model.

Results: We obtained data from 36 RCTs conducted from 1996 to 2009, comparing cART with ABC to other NRTI. Data of 13 RCTs with at least 24 wks of ABC exposure were available from HIV data repository of the manufacturer of ABC. Data on cardiovascular events were available from 16 RCTs (5,051 pts; 5,045 from published trials and 4,006 from data repository), data on mortality from 23 published RCTs (6,372 pts). Compared to the controls, ABC use did not increase the occurrence of major cardiovascular events (OR, 1.10; 95% CI, 0.56-2.10), and the overall mortality (OR, 1.84; 95% CI, 0.71-4.76).

Conclusions: Observational studies are prone to biases and should be interpreted with caution given the potential for confounding. By contrast, randomized trials provide stronger evidence than do observational studies. Our meta-analysis was based on RCTs, and did not show an increase in the occurrence of major cardiovascular events and overall mortality in ABC recipients.

Presenting author email: crucianamario@virgilio.it

WEPE0122
Framingham cardiovascular risk assessment of HIV/AIDS Brazilian patients on HAART: the importance of looking for additional information
A. de Mattos Marinho Sampaio1, P. Feljo Barroso2
1Universidade Federal do Rio de Janeiro, Hospital Escola Sao Francisco de Assis, Infectious Diseases, Rio de Janeiro, Brazil, 2Universidade Federal do Rio de Janeiro, Infectious Diseases, Rio de Janeiro, Brazil

Background: Life style, chronic inflammation, and drug adverse toxicity are suggested mechanisms for cardiovascular diseases associated with HIV infection. The accuracy of the Framingham cardiovascular score (FRS) to predict cardiovascular risk (CVR) among HIV-infected subjects is considered low by several authors. In order to estimate CVR, we evaluated traditional (FRS) and other independent CVR factors in a cohort of HIV-infected Brazilian subjects on antiretroviral therapy (HAART).

Methods: This is a cross-sectional study of 121 subjects on HAART randomly selected from a cohort of 750 subjects in a patient unit in Rio de Janeiro, Brazil. Exposure variables collected included fasting serum glucose and lipids, urinalysis and renal function test, anthropometry, electrocardiographic findings, ankle-brachial index (ABI), anthropometric data, tobacco use, family history of cardiovascular diseases (FH), and information on antiretroviral therapy. Multiple logistic regression was performed.

Results: Mean age was 43 years and 64% were men. The mean time since HIV diagnosis was 107 months and from HAART use was 88 months. 53% were receiving a protease inhibitor and 47% NNRTI. 31% were smokers, 13% had obesity, 12% sedentary lifestyle, 33% dyslipidemia, 16% hyper-LDL, 47% hyper-TG, 34% high TG/low HDL, 7% diabetes, and 27% MS. FH was present in 20%, left ventricular hypertrophy (LVH) in 6%, peripheral arterial disease (PAD) in 3%. Median FRS was 4%. When FRS was categorized in two groups, 84% were classified as low risk and 16% as medium/high risk categories. After allowing for the presence of MS, LVH, FH, and PAD, patients were re-classified as 52% in low risk and 48% as medium/high risk group.

Conclusions: These results support a role for other CVR factors in the global cardiovascular risk assessment of Brazilian AIDS patients on HAART. The investigation of MS, FH, LVH, and occult atherosclerosis may allow to accomplish better primary prevention strategies.

Presenting author email: anabesampaio@gmail.com

WEPE0123
Lipoprotein-associated phospholipase A2 (Lp-PLA2), a novel cardiovascular inflammatory marker, in HIV-infected patients
A. Mangili1,2, W. Wankel1,2, R. Wolfe7, J. Kuvin7, J. Polak5, R. Karas4
1Tufts University School of Medicine, Nutrition Infection Unit, Department of Public Health and Community Medicine, Boston, United States, 2Tufts Medical Center, Division of Geographic Medicine and Infectious Diseases, Boston, United States, 3DiaDexus, South San Francisco, United States, 4Tufts Medical Center, Division of Cardiology, Boston, United States, 5Tufts Medical Center, Department of Radiology, Boston, United States

Background: Lipoprotein-associated phospholipase A2 (Lp-PLA2) is an emerging, vascular-specific biomarker of CVD risk with low biovariability. We describe the distribution of Lp-PLA2 in a well-characterized cohort of HIV-infected adults and the associations between Lp-PLA2, CV risk factors and subclinical atherosclerosis.

Methods: Lp-PLA2 was assessed in 341 (25% women, 52% white, 74% on HAART) HIV+ subjects. Lp-PLA2 mass values of >235 mg/ml were considered high.

Results: Mean Lp-PLA2 mass was 313 ± 105 mg/ml and activity 173 ± 49 nmol/min/ml. 75% of patients had abnormal Lp-PLA2 values, but only 25% had CRP >3. Lp-PLA2 mass and activity were significantly higher in whites than other ethnic groups. Lp-PLA2 mass was higher than females and in those with LDL >130, HDL <40, TG >150. Higher Lp-PLA2 activity was found in those with the highest Framingham Risk Score (FRS) had significantly higher Lp-PLA2 activity. Participants with abnormal carotid intima-media thickness (cIMT) had higher Lp-PLA2 mass and activity. Those with coronary artery calcium (CAC) scores >100 had significantly higher Lp-PLA2 mass than those with lower or non-detectable calcium. If both CRP >3 and Lp-PLA2 >235, there was significantly more subclinical carotid and coronary atherosclerosis than when neither or only one biomarker was abnormal. Those on HAART and PI-based treatment had significantly higher Lp-PLA2 mass and activity than those who were treatment-naïve or not on PIs. No difference was found those on NNRTI. Those with abnormal Lp-PLA2 mass had higher CD4 and lower VL. In multivariate regression, HAART- and PI-use were positively associated with Lp-PLA2 activity.

Conclusions: Lp-PLA2 is highly abnormal in HIV-infected patients and is associated with several CV and HIV treatment-specific risk factors. Lp-PLA2 may be used as an additional and more vascular specific biomarker for CV risk stratification in HIV-positive patients on treatment.

Presenting author email: alexandra.mangili@tufts.edu
WEPE0124
Fatty liver disease is an indicator of underlying heart disease among HIV-infected persons
N. Crum-Cianflone1, S. Medina1, D. Krausel1, D. Wessman2, J. Stepenkoski2, C. Brandi2, G. Boswell3
1Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Bethesda, United States, 2Naval Medical Center, San Diego, United States, 3Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Bethesda, United States.

Background: Cardiovascular disease is an increasing concern among HIV-infected persons (HIV+). Whether fatty liver disease is a marker for underlying coronary artery disease (CAD) among HIV-infected persons is unknown.

Methods: We performed a cross-sectional study among HIV+ adults to evaluate the prevalence of and factors associated with CAD including fatty liver disease. Participants underwent a CT scan for coronary artery calcium (CAC) scoring and assessment for fatty liver disease (liver-to-spleen ratio >1.0). CAC scores were examined as dichotomized (positive>0 or negative) and continuous variable using logistic and linear regression models.

Results: We studied 204 HIV+ adults with a median age of 44 years (IQR 36-50), 40% were African American, and 27% other. Median C4D count was 584 and 83% were receiving antiretroviral medications. Seventy-three (36%) had a positive CAC score and 29 (14%) subjects had fatty liver disease. Among those with CAC scores of 0, 1, 100, >100, the percentage with concurrent fatty liver disease was 9%, 18%, and 41%, respectively (p=0.003). In the univariate analyses, factors associated with CAD included increasing age, low CD4 nadir, duration of HIV, Caucasian race, receipt of HIV medications, current abacavir use, high triglycerides, and hypertension, diabetes, and fatty liver disease (all p<0.05). In the multivariate model, fatty liver disease (OR 3.5, p=0.01), age (OR 4.6 per 10 years, p<0.001), and hypertension (OR 2.4, p=0.03) were associated with CAD. Similar results were found examining CAC as a continuous variable with a significant increase in abdominal abacavir use (p=0.08).

Conclusions: CAD is prevalent (36%) among HIV-infected persons despite significant improvements in health care. Fatty liver disease was associated with concurrent CAD. Identification of fatty liver disease among HIV+ individuals should prompt assessment for underlying CAD and risk factor reduction, including possibly discontinuing abacavir, for prevention of cardiovascular complications.

Presenting author email: nancy.crum@med.navy.mil

WEPE0125
Poornal function and low CD4 count associated with myocardial ischemia in HIV patients
G. Gumm1, L. Fanny2
1Harvard Medical School, Boston, Massachusetts, United States, 2Johns Hopkins University, Baltimore, Maryland.

Background: Coronary artery disease risk factors in HIV patients who had undergone nuclear stress testing.

Methods: The HIV Clinic patient database was searched to find patients who had undergone nuclear stress testing between 2004 through 2009. Out of 6890 patients, 162 patients were noted to have nuclear stress testing done. Inclusion criteria were: (1) Continuous use of same HAART medications for 12 months; (2) underwent nuclear stress testing; (3) availability of other variables such as height, weight, age, sex, ethnicity, CD4, viral load, race, antiretroviral medications. Seventy-three (36%) had a positive CAC score and 29 (14%) patients had fatty liver disease. Results: We studied 204 HIV+ adults with a median age of 44 years (IQR 36-50), 40% were African American, and 27% other. Median C4D count was 584 and 83% were receiving antiretroviral medications. Seventy-three (36%) had a positive CAC score and 29 (14%) subjects had fatty liver disease. Among those with CAC scores of 0, 1, 100, >100, the percentage with concurrent fatty liver disease was 9%, 18%, and 41%, respectively (p=0.003). In the univariate analyses, factors associated with CAD included increasing age, low CD4 nadir, duration of HIV, Caucasian race, receipt of HIV medications, current abacavir use, high triglycerides, and hypertension, diabetes, and fatty liver disease (all p<0.05). In the multivariate model, fatty liver disease (OR 3.5, p=0.01), age (OR 4.6 per 10 years, p<0.001), and hypertension (OR 2.4, p=0.03) were associated with CAD. Similar results were found examining CAC as a continuous variable with a significant increase in abdominal abacavir use (p=0.08).

Conclusions: CAD is prevalent (36%) among HIV-infected persons despite significant improvements in health care. Fatty liver disease was associated with concurrent CAD. Identification of fatty liver disease among HIV+ individuals should prompt assessment for underlying CAD and risk factor reduction, including possibly discontinuing abacavir, for prevention of cardiovascular complications.

Presenting author email: nancy.crum@med.navy.mil

WEPE0126
Comparison of cardiac manifestation in children receiving antiretroviral treatment to those in treatment naive children attending public health care in Tanzania
W. Schimana1, R. Damji1, L. Friedemann1, T. Schimana1, H. Diedenhofen2, S. Gopal1
1Infectious Disease Clinical Research Program, Uniformed Services University of the Health Sciences, Bethesda, United States, 2University of Toronto, Toronto, Ontario, Canada.

Background: In resource constraint settings few studies have explored cardiac manifestation (CM) in children with HIV, most of them in the pre-ART area. Data lack from pediatric treatment cohorts in Africa where the burden of HIV infection is highest.

Methods: From September 2008 to March 2009 HIV-infected children attending the pediatric infectious disease clinic at Kilimanjaro Christian Medical center, Northern Tanzania were enrolled using convenient sampling. Prevalence and characteristics of CM was assessed through history taking, physical exam, echocardiography. Inclusion criteria were: (1) clinical suspicion of CM; (2) echocardiography. Exclusion criteria were: (1) patient characteristics like sex, age, HIV status, CD4 >350 cells/ml; (2) history of acute illness; (3) availability of other variables such as height, weight, age, sex.

Results: We studied 389 children, 162 patients were noted to have cardiac assessment done. 159 (41%) of the 389 children were on ART. 15 (78.9%) of the 19 children with CM on ART were on ART compared to 10 (47.6%) of the 21 CM children who were ART naive (p=0.006). Other parameters were similar (CD4%, HIV, sex and age (years)). 33 children on an ART containing regimen had CM compared to 8 (42.1%) of the 19 children with UVD on ART and four on d4T (p=0.008). 2 children were previously suspected to have a cardiac problem.

Conclusions: CM are common in children on ART but often clinically not suspected. All children with HIV especially if on ART should undergo regular cardiac evaluation.

Presenting author email: wschimana@pedaids.org

WEPE0127
Reduced arterial stiffness and Framingham cardiovascular risk score in men at high cardiovascular risk after switching from abacavir to tenofovir
K. Sinn1, R. Richardson1, B. Norris2, A. Carr1
1St Vincent’s Hospital Sydney, St Vincent’s Centre for Applied Medical Research - Clinical Research Program, Sydney, Australia, 2St Vincent’s Hospital Sydney, HIV, Immunology and Infectious Diseases Unit, Sydney, Australia.

Background: Abacavir is associated with an increased risk of cardiovascular disease (CVD) that has been hypothesised to be independent of traditional risk factors. Change in Framingham risk score (FRS) has not been found to predict CVD risk with abacavir, but patients with high CVD risk (high FRS) have not been specifically evaluated. Increased arterial stiffness is associated with CVD in the general population. Applanation tonometry can measure aortic stiffness by determining the augmentation index (AIx) from a radial artery waveform. In HIV+ adults, AIx is increased in those receiving ART and correlates with higher FRS.

Methods: We measured AIx and FRS over 24 weeks in stable plasma HIV RNA < 50 copies/ml and 10-year Framingham risk score (FRS) >10% who switched from abacavir to tenofovir, and determined whether any AIx change could be explained by change in FRS. Comparisons were by analysis of covariance. Multivariable analysis was performed using logistic regression.

Results: We studied 20 men (median 56 years, mean 10-year FRS 15%). Mean baseline AIx was elevated at 13% (SD 6). AIx declined acutely by 4.0% at week 4 (p=0.030) and by 2.7% at week 24 (p=0.067), at which point all patients remained on tenofovir and had undetectable viral loads. FRS also declined (mean 2.3% at week 24; p=0.062) with no significant change in any FRS component except for a significant decrease in fasting total cholesterol (0.52 mmol/l at week 24, p=0.004; with new use of lipid-lowering therapy). After adjustment for change in FRS, the 2 and 4 weeks AIx were non-significant (p=0.50 and 0.72, respectively).

Conclusions: These non-randomized, pilot data suggest switching from abacavir to tenofovir in patients with elevated FRS reduces arterial stiffness, a change that may be contributed to by reduction in total cholesterol.

Presenting author email: morris@stvincents.com.au

WEPE0128
HIV infection is not associated with echocardiographic signs of cardiomyopathy among pregnant Ugandan women
C. Longenecker1, C. Mondo1, V-V Le2, T. Jensen3, E. Foster4
1University Hospitals of Cleveland, Division of Cardiology, Cleveland, United States, 2Uganda Heart Institute, Kampala, Uganda, 3University of California at San Francisco, San Francisco, United States.

Background: Peripartum cardiomyopathy is common in Sub-Saharan Africa. To what extent this may be explained by the high prevalence of HIV infection is unknown. We sought to examine, among a population of Ugandan women in their third trimester of pregnancy, whether HIV infection is independently associated with echocardiographic signs of cardiomyopathy compared to HIV negative controls.

Methods: 41 HIV-infected and 41 HIV-negative pregnant women were recruited from the antenatal clinics of Mulago Hospital in Kampala, Uganda in February 2009. Women with symptoms of heart failure prior to pregnancy were excluded (n=1). A standardized transthoracic echocardiogram was performed on each participant using a Sonosite MicroMaxx version 3.4 portable ultrasound machine.

Results: In unadjusted models, there were no statistically significant differences between groups (HIV vs. control) for the following echocardiographic outcomes: (1) mean left ventricular (LV) ejection fraction, by Simpson’s method of discs (60.4 vs. 60.2%, p=0.87); (2) LV end systolic volume index, by method of discs (58.3 vs. 59.5mL/m², p=0.81); (3) LV mass, by the trun- cated ellipsoid formula (66.8 vs. 65.5gm/m², p=0.65); (4) left atrial volume index, by method of discs (22.4 vs. 22.2mL/m², p=0.88); (5) E/E’ ratio (5.5)

Abstract Book Volume 2 | www.aids2010.org
WEPE0129
Coronary computed tomography angiogram shows a high prevalence of coronary stenosis in asymptomatic HIV-infected subjects with low cardiovascular risk

G. D’Ettorre1, G. Ceccarelli1, M. Francione1, F. Vullo1, S. Mewamba1, M. Nancioni1, S. Strano1, I. Mezzaroma1, S. Baroncelli2, R. Passariello1, G. d’Ettorre1, G. Ceccarelli1, M. Francone1, F. Vullo1, S. Mewamba1, M. Nancioni1, S. Strano1, I. Mezzaroma1, S. Baroncelli2, R. Passariello1, F. Fedele2, L. Palmasano2, V. Vullo1
1Università La Sapienza, Rome, Italy, 2Istituto Superiore di Sanità, Rome, Italy

Background: Coronary heart disease (CHD) is a leading cause of mortality and morbidity in HIV+ infected individuals, attributable to traditional and non traditional risk factors. Coronary calcium has been measured as a surrogate marker of subclinical coronary atherosclerosis, but the actual prevalence of CHD in asymptomatic subjects is unknown. We therefore performed a cross sectional study in HIV+ subjects with low cardiovascular risk, using 64 slice multidetector-row computed tomography (MDCT), which currently represents the foremost non invasive tool to assess coronary artery stenosis.

Methods: Study population consisted of 52 asymptomatic HIV+ subjects, with low cardiovascular risk, defined as: Framingham risk score ≤10, absence of metabolic syndrome, Body Mass Index ≤25, negative exercise electrocardiogram. All patients were studied with a 64 slice computed tomographic scanner: Slice thickness: 0.9 mm, slice interval: 0.7 mm, tube current: 250 mAs, tube voltage: 140 kVp. Analysis of MDCT was performed in a radiologist free reading area.

Results: Fifty-two subjects (86.6% males, mean age 46.9 ± 7.9 years) were studied. Eighty-two percent of them had been on HAART for 8.63 ± 5.62 years. 73.1% had HIV-1 RNA < 50 copies/ml; mean CD4 cell count was 500 ± 242 cells/μl. Overall, MDCT showed coronary stenosis in 26/52 (50%) subjects. Stenosis was classified as mild in 14, moderate in 5 and severe (> 70%) in 5 (9.6% of the whole population). These latter subjects underwent invasive coronary angiography, which fully confirmed MDCT findings in all of them. The two groups, with or without MDCT abnormalities, were no different for any of the explored demographic, clinical and viroimmunologic variables.

Conclusions: In a population carefully selected for a low cardiovascular risk, MDCT revealed an unexpectedly high rate and severity of coronary stenosis. Intensified screening programs for CHD should probably be offered to all HIV+ subjects.

Presenting author email: l.palmasano@iss.it

WEPE0130
Association of antiretroviral therapy and HIV-related factors with acute myocardial infarction rates

V. Trigali1, S. Regan1, H. Lee1, P. Sayk1, J. Meigs1, S. Grinspoon1
1Massachusetts General Hospital, Medicine/Infectious Diseases, Boston, United States, 2Massachusetts General Hospital, Biostatistics Center, Boston, United States, 3Brigham & Women’s Hospital, Medicine/Infectious Diseases, Boston, United States, 4Massachusetts General Hospital, Program in Nutritional Metabolism, Boston, United States

Background: Cardiovascular disease is prevalent among HIV patients. We investigated the relative association of antiretroviral medications, immunologic and virologic factors with incident AMI rates among HIV patients.

Methods: We used a clinical data registry-based cohort comprising all patients with HIV and at least two encounters between 12/98 and 2/08 in a U.S. healthcare system. Demographics, comorbidities (hypertension, diabetes, dyslipidemia, chronic kidney disease), medication, CD4, and HIV viral load data were obtained. We used multivariate logistic regression to assess associations between AMI and each antiretroviral medication in separate models (additively adjusting for 1) demographics; 2) concurrent antiretroviral medications significant in univariate analysis; 3) comorbidities; 4) CD4 count/CD4 viral viral load).

Results: Of 6517 HIV patients (30.6% female), 273 (4.2%) had an AMI. The figure shows the odds ratios and 95% confidence intervals for each of the four models for each medication. In fully adjusted individual models, indinavir (OR 1.93; 95% CI 1.04-3.57) and nefapravir (OR 1.75; 95% CI 1.02-3.01) were associated with AMI. In a combined model adjusting simultaneously for cardiovascular, immunologic and virologic factors and antiretroviral medications significantly associated with AMI, hypertension (OR 1.97; 95% CI 1.25-3.12) and CD4 count less than 200/mm3 (OR 1.74; 95% CI 1.07-2.81) were significantly associated with AMI, whereas individual medications were not.

Conclusions: Several individual antiretroviral medications are associated with increased risk of AMI, but the effects are attenuated when other factors are considered. Immunologic control as reflected by the CD4 count appears to be a more important factor than the effects of individual medications.

Author Index

WEPE0131
Hyperhomocysteinemia in HIV-infected patients: prevalence and related factors

A. Costa1, M.A. Hernando2, M. Torralba González de Suso3, M.B. Martínez Lasheras1, C. Fernández Miranda1, J. Martínez1, M. Ríquez Zapata1, R. Ruiz1, F. Pulido1
1Hospital Universitario de Guadalajara, Servicio de Medicina Interna, Guadalajara, Spain, 2Universidad Europea de Madrid, Departamento de Especialidades Médicas, Villaviciosa de Odón, Spain, 3Hospital Universitario 12 de Octubre, Servicio de Medicina Interna, Madrid, Spain

Background: Hyperhomocysteinemia has been described as a cardiovascular risk factor. HIV infection and antiretroviral therapy have also been related with higher cardiovascular risk. We compared the prevalence of hyperhomocysteinemia (HyperHcy) in a cohort of HIV infected patients (with or without antiretroviral therapy [ART]) with the prevalence in subjects without HIV infection.

Methods: Analytic cross sectional study. Data from 381 HIV infected patients (Group A) and 172 healthy subjects (Group B) were included. Homocysteine was measured by HPLC technique. The study population was divided according to the use or not of ART. HyperHcy was defined as serum homocysteine >12 μmol/L.

Results: Prevalence of Hcy was 11.3% in group A vs 34.9% in group B (OR 4.06, 95%CI: 2.33-7.07; p=0.0001). HIV-infected patients without ART have higher Hcy prevalence (43%) than HIV-negative controls (OR 5.56; 95%CI 2.9-10.9; p< 0.0001). Among HIV-infected patients, those with ART shown a trend towards less frequent HyperHcy (B-0: 43% vs. B-1: 21.1%; B-2: 35%; B-1,2 vs B-0: OR 0.57, IC 95% 0.3-1.08; p=0.083). In the multivariate analysis, factors independently related with Hcy were: age (OR 1.04 per additional year; 95%CI 1.004-1.072;p=0.003), male gender (OR 4.1; 95%CI 1.88-9.01; p< 0.001); MTHFR-TT genotype (OR 4.37; 95%CI 1.53-12.5); folic acid (OR 0.86; 95%CI 0.77-0.96) and HIV infection (OR 2.62; 95%CI 1.28-5.3).

Conclusions: HyperHcy was higher in HIV infected patients. ART partially correct this effect, without significant differences between nevirapine or lopinavir/ritonavir based ART. Other independently related factors are age, male gender, folic acid levels and MTHFR genotype.

Presenting author email: asuncioncosta@telefonica.net

Poster Exhibition

Wednesday 21 July

Thursday 22 July

Friday 23 July

Late Breakers Posters
WEPE0132
Microalbuminuria and hypertension in HIV infected patients
C. Uccelleri, P. Mancino, K. Falasca, E. Pizzigallo, J. Vecchiet
Clinic of Infectious Diseases, Department of Medicine and Science of Aging, 
"G. d'Annunzio" University, Chieti, Italy
Background: Evidence of hypertension and microalbuminuria, two important risk factors for renal and cardiovascular disease(CVD), is increased in HIV infected patients. Anti-hypertensive drugs inhibiting the renin-angiotensin system exert an antiproteinuric effect. Telmisartan, an angiotensin II receptor blocker partial agonist of the PPAR-γ approved for the treatment of hypertension, seems to exert a nephro-protective effect independent of blood pressure reduction in the general population. The aim of the study was to evaluate kidney protective effects of telmisartan in hypertensive HIV+ patients with microalbuminuria.
Methods: 89 Caucasian male HIV+ patients with suppressed viremia and CD4 cell count below 300 cell/ml for at least 6 months, who had received >12 months of cumulative exposure to combined antiretroviral therapy (ART) without change, were screened for hypertension and microalbuminuria(> 30 mg/l). A total of 27 had hypertension, 18 of whom had microalbuminuria and were treated with 80mg telmisartan daily. Systolic(SBP) and diastolic(DBP) blood pressure, microalbuminuria, creatinine, MDRD-GFR, cystatin-C, CRP, ESR, IC-18, VEGF and endothelin-1 were measured at baseline (T0), three (T3) and six months (T6).
Results: Teimisartan improved microalbuminuria, which was significantly decreased at T3 (p=0.0006) and T6 (p=0.0003), without creatinine and MDRD-GFR changes. SBP and DBP values were significantly decreased at T3 and T6 (p<0.0001). Cystatin-C, endothelin-1 and VEGF were significantly reduced at T3 (p<0.0001; p=0.0007 and p=0.001, respectively) and T6 (p<0.0001; p=0.0004 and p=0.0003, respectively). Infarction indexes ESR, PCR and IL-18 were decreased at T3 and T6 (p=0.01; p=0.0007 and p=0.004, respectively).
Conclusions: Telmisartan was well tolerated and effective in improving hypertension and decreasing microalbuminuria. These findings are indicative of new kidney-protective effects of telmisartan. Mechanisms causing microalbuminuria in HIV+ patients could be related to infection, chronic inflammation and endothelial dysfunction. Decreased inflammation indexes, endothelin-1 and VEGF may be related to an anti-inflammatory and endothelial protective effect of telmisartan also in HIV+ patients.
Presenting author email: uccelleri@tiscalit.it

WEPE0133
Cardiovascular abnormality in HIV patients and response to HAART therapy
B. Saha1, J. Bari1, B. Chatterjee1
1School of Tropical Medicine, Tropical Medicine, Kolkata, India, 2North Bengal Medical College, Siliguri, India
Background: HIV patients often present with dyspnoea. Physicians consider pulmonary causes but often overlook cardiovascular cause as etiology.
Methods: Prospective study has been done over 1 year to evaluate cardiovascular status of HIV infected patients getting HAART. Each patient had undergone clinical evaluation and echo colour Doppler study before initiation of HAART. A total of 89 HIV+ patients were taken for this study and after 1 year of completion of HAART, repeat evaluation was done.
Results: Among 60 patients 7 died and 2 lost in follow up during study period. Mean LV diameter at diastole (LVIDd) was 42.64 ± 16.26 mm, LV mass index was 95.7 ± 44.07 g/m2. Most patients had mild to moderate systolic dysfunction. Mean pulmonary arterial pressure was 49.40 ± 17.56 mm Hg. 16(31.77%) cases had mild,2 (3.92%) patients had severe and 4(7.84%) had moderate pulmonary hypertension. After 1 yr of successful HAART therapy there was no significant change in mean EF, LVIDd, but mean pulmonary arterial pressure dropped to 42.4 ± 15.67 mm Hg. Among patients having mild pulmonary hypertension came down to 9.17(65.75%), but number of patients having moderate to severe pulmonary hypertension remained same.
Conclusion: Cardiovascular status should be assessed before initiation of HAART. HAART not only reduce the incidence of opportunistic infections also reduce pulmonary arterial pressure. But once patient develop moderate to severe pulmonary arterial hypertension or develop LD dilatation, HAART however may not regress same. So early detection of cardiovascular abnormality should be considered before initiation of antiretroviral therapy.
Presenting author email: j_pal2004@rediffmail.com

WEPE0134
Arterial stiffness as target organ damage in HIV infected patients living in developing countries
G. Guaraldi1, L. Kaloi2, S. Zona1, A. Banchi1, C. Soara1, M. Palmieri1, C. Broglio1, S. Bertolone1, P. Salvi1, P. Raggi1
1University of Modena and Reggio Emilia, Clinic of Infectious Diseases, Modena, Italy, 2Usokami Health Centre, Usokami, Tanzania, United Republic of, 1ChU Nancy, Nancy, France, 2Emory University School of Medicine, Atlanta, United States
Background: The expansion of HIV epidemic and scaling up of antiretroviral therapy (ART) in developing countries raise a concern for the development of cardiovascular disease (CVD) in HIV-infected patients living in those areas. Aortic pulse wave velocity (PWV) is a non-invasive and objective measure of arterial wall elasticity. An elevated PWV has been established as an indicator of cardiovascular disease (CVD) in HIV-infected patients living in those areas. Arterial stiffness as target organ damage in HIV-infected patients living in developing countries.
Methods: Cross-sectional case-control study of 89 HIV ART-naive, 75 HIV on ART patients living in developing countries.

WEPE0135
Neither abacavir nor tenofovir induce direct in vitro effects on endothelial cells
C. Kogi1, G. Rajasekharan1, S. Gupta1, B. Taylor1, A. Renwick1, Z. Desta2, M. Clauss1
1Indiana University School of Medicine, Physiology, Indianapolis, United States, 2Indiana University School of Medicine, Division of Infectious Disease, Indianapolis, United States, 1Indiana University School of Medicine, Division of Clinical Pharmacology, Indianapolis, United States
Background: The use of abacavir has been controversially implicated as being associated with an increased risk of myocardial infarction in HIV-infected patients. Suggested mechanisms have included endothelial dysfunction and increased systemic inflammation. However, a precise cellular mechanism has not yet been identified to support biological causality. Thus, we examined the effects of abacavir and tenofovir on endothelial responses to abacavir and tenofovir in an in vitro system.
Methods: Human Coronary Artery Endothelial Cells (HCEAC) were maintained in EBM-2 medium. For these experiments, 4.0x10^4 HCEAC between passage 2 to passage 4 (of the purchased lot) were evaluated. The median and maximum in vivo physiological concentrations for abacavir (2 and 4µM) and tenofovir (0.65 and 1.3µM) were tested. The treated and untreated HCEACs were lysed using the NuclearSpin RNA isolation kit at four different time points (2, 8, 24, and 48hrs). Quantitative real time RT-PCR was performed. We examined the relative gene expression levels of endothelial adhesion molecules (VCAM-1, and ICAM-1), inflammatory chemokines (RANTES, MCP-1, IP-10), an inflammatory cytokine (IL-6), oxidative stress (ROS producing NADPH oxidase subunit GP91PHOX), and apoptosis (BCL-2, BAX). The target gene expression was compared to the 2-89 method. All experiments were replicated at least 3 times. Statistical comparisons were performed using ANOVA and corrected for multiple comparisons.
Results: Exposure of coronary endothelial cells to abacavir and tenofovir resulted in no changes in any of the tested genes at any time point or at any concentration. In contrast, TNF-a (2-8ng/ml) induced strong induction of all genes tested in coronary endothelial cells.
Conclusions: We found no evidence that either abacavir or tenofovir had direct in vitro effects on the coronary endothelial cell gene transcription of the selected mediators of inflammation, NADPH oxidase dependent oxidative stress, or apoptosis. If abacavir does increase cardiovascular risk, it is likely not through the pathways examined in this study.
Presenting author email: chul.kim@iupui.edu

WEPE0136
HEART failure and CVD in HIV patients: is there a common mechanism?
K. Yoon, V. Jafri, M. Doherty, N. Reddy, C. Foutas, S. Chong
University of Cape Town, South Africa
Background: The increasing prevalence of cardiovascular disease (CVD) amongst individuals who have undergone ART may be due to a combination of increased CVD risk factors and to the direct effects of ART itself. Whether ART is associated with higher rates of CVD and whether this is related to the risk factors for CVD, in the absence of a well-defined control group is not clear. We attempted to answer this question by looking at the prevalence of CVD in patients infected with HIV and those uninfected.
Methods: We performed a cross-sectional study of 400 patients infected with HIV and 400 age-matched HIV-negative controls. The prevalence of CVD risk factors (diabetes, hypertension and dyslipidaemia) and CVD were determined using self-reported questionnaires and medical records. Results are presented as a percentage of the sample.
Results: Prevalence of CVD risk factors and CVD in patients infected with HIV

WEPE0137
Biomarkers of remission in HIV infection
R. D’Souza1, T. Green2, D. Taneja1, N. Desai1
1University of North Carolina, Chapel Hill, United States, 2University of North Carolina, Greensboro, United States
Background: The presence of HIV specific antibodies in the circulation is typically used to indicate HIV plasma viral load and disease progression. Since the introduction of antiretroviral therapy (ART), the rate of achieving virological suppression has increased and treatment options to improve immune function and reduce associated inflammation need to be developed. Several attempts have been made to identify surrogate markers of viral load or immune recovery in response to ART, and establish them as clinical tools. However, markers that predict treatment failure or improvement in immune function are still not available.
Methods: We identify potential biomarkers of remission in HIV infection by measuring the expression levels of selected cytokines and chemokines. The study was performed on sera of HIV patients on ART and healthy controls. A total of 12 cytokines and chemokines were measured using a multiplex panel.
Results: The levels of several cytokines and chemokines were significantly different between ART-naive and ART-treated patients. The results suggest that there is a differential expression of cytokines and chemokines in response to ART.
Conclusions: The findings of this study have implications for the development of biomarkers of remission in HIV infection. Further studies are needed to validate these findings and to determine the clinical utility of these biomarkers.
WEPE0136 Reduced renal function and smoking habit predict low bone mineral density (BMD) in HIV-infected patients: a single-center observational study

G. Penco, A. Giusti, M. Pizzonari, M. Razzano, A. Barone, M. Fiaschi, R. Zangerle

University Hospital, Badalona, Spain, *Galliera Hospital, Dept. of Infectious Diseases, Genova, Italy, *Galliera Hospital, Dept. of Geriatrics, Genoa, Italy, *ASL I Genovese, Dept. of Prison Medicine, Genova, Italy, *ASMN Hospital, Dept. of Geriatrics, Reggio nell’Emilia, Italy

Background: To assess the prevalence of low bone mineral density (BMD) and evaluate risk factors for osteopenia/osteoporosis in a cohort of north-Italian HIV+ patients.

Methods: Subjects were included if they were naïve to antiretroviral treatment (ART) or receiving first line ART. Subjects underwent a standardized baseline assessment to evaluate demographic and anthropometric characteristics, clinical history, biochemical parameters, ART regimens. Lumbar spine, femoral neck and total hip BMD measurements were obtained by DXA. T-scores and Z-scores were calculated using the appropriate NARANES reference values. Low BMD was defined by a T-score < -1 in at least one of the 3 sites considered. To evaluate predictors of low BMD bivariate and multivariate analyses were performed. First, it was assessed the bivariate association between low BMD and variables collected at baseline. Then, all co-variables associated with low BMD with a p < 1 were retained and included in a logistic regression analysis.

Results: 112 HIV+ subjects (males=68, females=44) aged 20-60 years were enrolled in the study. Overall 12% of patients presented osteoporosis (T-score < -2.5) and 35% presented osteopenia (T-score < -1 > -2.5). Univariate analysis revealed the following significant associations with low BMD: older age (p=0.03); low calcium intake (p=0.08); current smoking (p=0.024), reduced creatinine clearance (p=0.018; OR=1.01; 95%CI 1.00-1.02) and Cystatin C showed the strongest correlation with low BMD (p=0.033).

Conclusions: In our population the prevalence of osteopenia and osteoporosis was similar to those previously reported. Interestingly, no ART, neither tenofovir treated patients showed to be involved in the pathogenesis of low BMD.

Presenting author email: pontals@yahoo.com

WEPE0137 Validation between isotopic glomerular filtration rate and other methods to estimate renal function in a well-characterized HIV-infected population

A. Bonjoch1, B. Bayés2, J. Riba3, J. Puig1, C. Estany1, N. Pérez-Álvarez4, R. Piscopo1, E. Pontali1,3, G. Pioli4

112 HIV+ subjects (males=68, females=44) aged 20-60 years were enrolled in the first 106 patients at time of switching, 12 and 24 weeks for the based regimen (TDF/3TC/NVP group) after two years of an ongoing randomized trial. All patients were assessed at time of switching, 12 and 24 weeks for serum phosphorus, uric acid, creatinine, estimated glomerular filtration rate (eGFR) by modification of diet in renal disease equation, and urinalysis.

Results: Of 62 patients, 28 patients were in TDF/3TC/EFV group and 34 patients were in TDF/3TC/NVP group. There were no significant differences in demographic characteristics at the time of switching (P>0.05). At 12 weeks, comparing [mean±SD or median (IQR)] measures between TDF/3TC/EFV group and TDF/3TC/NVP group were: phosphorus of 1.60±0.53 vs. 2.81±0.32 mg/dL (P=0.005), uric acid of 5.53±1.38 vs. 5.03±1.23 mg/dL (P=0.136), eGFR of 116 (98-134) vs. 105 (98-123) mmmol/min (P=0.270), creatinine of 0.786±0.14 vs. 0.84±0.11 mg/dL (P=0.324). eGFR of 110 (99-121) ml/min/1.73m2 for the MDRD equation and 98 (92-103) ml/min/1.73m2 for the Cockcroft-Gault (CG) equation, and Cystatin C.

Conclusions: In our study, isotopic GFR was compared to 24-hour urine CrCl, Modification of Diet in Renal Disease (MDRD) equation and Cockcroft-Gault (CG) equations. Results showed the following significant associations with low BMD: older age (p=0.03); low calcium intake (p=0.08); current smoking (p=0.024), reduced creatinine clearance (p=0.018; OR=1.01; 95%CI 1.00-1.02) and Cystatin C showed the strongest correlation with low BMD (p=0.033).

Presenting author email: drweerawat@hotmail.com

WEPE0138 Fanconi syndrome is associated with morphological damage of mitochondria in proximal tubular cells

M. Gisger1, D. Heininger1, M. Sarcettii1, M. Kitchen, N. Romani1, R. Zangerle1
1Medical University Innsbruck, Dept. of Dermatology and Venerology, Innsbruck, Austria, 2Medical University Innsbruck, Dept. of Internal Medicine, Innsbruck, Austria

Background: A wide clinical spectrum of renal diseases affects individuals with HIV. Among them Fanconi syndrome (FS), which is most often found in patients taking tenofovir plus a ritonavir boosted protease inhibitor. The mechanism of this disorder is not clearly understood. Structural alterations of mitochondria, mitochondrial DNA deletion and dysfunction of mitochondrial DNA-encoded respiratory chain subunits could be seen in tenofovir treated rats and might contribute to the pathogenesis of FS.

Methods: Retrospective single center analysis of renal biopsies from March 2003 to December 2006. Renal biopsies were evaluated for parenchymal damage by light and electron microscopy. Kidney tissue was fixed in half-strength Karnovsky’s paraformaldehyd-glutaraldehyd fixative. Ultrathin sections, cut by Reichert Ultracut, stained with 1% lead citrate were examined with a goniometer-equipped Philips EP 400 electron microscope operating at 80-80 kV.

Results: Renal biopsies were taken from 7 patients. 5 patients (%) suffered from FS with proteinuria, glucosuria, hypouricemia and renal insufficiency grade 2 or 3. They were taking tenofovir at least 420 days (median 441 days). In 4 patients (57%) minimal tubular damage was observed. By electron microscopic examination 4 patients with FS (50 %) showed massive damage of the mitochondrial structure in proximal tubular epithelium. Mitochondria were clearly enlarged (‘giant mitochondria’) with reduction of mitochondrial cristae. Some cristae were arranged in labyrinthal form. In the electron microscopical examination 4 patients with FS (80 %) showed massive damage of mitochondria in proximal tubular cells.

Conclusions: Morphologic changes of mitochondria in patients with tenofovir induced Fanconi syndrome have been observed, similar to changes seen in tenofovir treated rats and in muscle and liver cells of patients with “d-drugs”. This supports the hypothesis that mitochondrial dysfunction might contribute to FS.

Presenting author email: martinsgisseringer@uki.at

Abstract Book Volume 2 | www.aids2010.org
WEPE0140
Predicting near-term incidence of chronic kidney disease in HIV-infected patients
N. Yanagisawa1, 2, M. Ando1, 2, A. Ajisawa1, K. Tsuchiya1, K. Nitta1
1Tokyo Metropolitan Komagome Hospital, Department of Infectious Diseases and Nephrology, Tokyo, Japan. 2Tokyo Women’s Medical University, Department IV of Internal Medicine, Tokyo, Japan

Background: HIV-infected individuals often have several concurrent risk factors for chronic kidney disease (CKD) to quantify the cumulative effect of multiple factors on CKD. We were interested in developing a risk model to predict 1-year incidence of CKD in the HIV-infected population.

Methods: There were 721 consecutive HIV-infected individuals enrolled at our hospital between January and March 2008. Of these, 623 subjects without prevalent CKD at baseline completed a follow-up of 1 year. Of these, 25 subjects developed incident CKD during the study period. CKD was defined as an estimated glomerular filtration rate (eGFR) based on serum creatinine (Cr) of less than 60 mL/min/1.73 m2. To derive a prediction model, continuous variables were divided into categories to facilitate risk estimation. Multivariate logistic regression was used to determine baseline categories associated with increased risk of CKD. The ability of the models was evaluated using area under the receiver operating characteristic (ROC) curves. The within-study validity of the models was assessed in 10 repeated random-sample subsets, which included 96% of the participants.

Results: There were 2 categorical models developed: the complete model with 9 predictors: age, CD4+ T cell count, anemia, hypertension, diabetes, proteinuria, enzynuria, eGFR, and triglycerides (AROC, 0.879; sensitivity, 96%; specificity, 70%) and the simplified model with 6 predictors, without 2 urinary indexes and eGFR (AROC, 0.855; sensitivity, 96%; specificity, 67%).

Conclusions: Both created models may be useful tools for identifying individuals with a high likelihood of CKD in the near future.

Presenting author email: naoki@cikp.jp

WEPE0141
Incidence and risk factors for tenofovir-associated renal function decline among Thai HIV-infected patients with low body weight
K. Chaisiri1, 2, C. Bowonwatana1, 2, P. Visutthimak1, 2, J. Waivarawoot3, N. Kasetratan1, S. Kiertiburanakul4
1Faculty of Pharmaceutical Sciences, Chulalongkorn University, Department of Pharmacy Practice, Bangkok, Thailand. 2Chonburi Hospital, Chonburi, Thailand. 3Faculty of Medicine Ramathibodi Hospital, Mahidol University, Department of Retine and Nephrology, Bangkok, Thailand.

Background: The well known adverse effect associated with tenofovir (TDF) is nephrotoxicity. We aimed to determine the incidence and factors for TDF-associated renal function decline among Thai HIV-infected patients with low body weight.

Methods: Retrospective and prospective cohort studies were conducted. We enrolled HIV-infected adults who initiated TDF between January 2007 and October 2009. Renal function decline was defined as a 25% decrease in glomerular filtration rate (GFR) from the baseline using the Simplified Levey modification of diet in renal disease (MDRD). All patients having baseline MDRD Glomerular Filtration Rate (GFR) ≥ 60 mL/min/1.73 m2 were selected. TDF was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected. RI was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected. RI was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected.

Background: Older aging, lack of immunorecovery and exposure to boosted-PI as main determinants of renal impairment in HIV patients during cART.

Results: There were 862 HIV-infected and 1,214 HIV-uninfected men who contributed to the analysis. The distribution of hemoglobin values across all 17,341 person-visits adjusting for age was, on average, lower in HIV-infected men by an estimated 0.49 g/dL compared to HIV-uninfected men. Having a GFR ≤ 60 mL/min/1.73 m2 had a significant effect in HIV-infected men, decreasing mean hemoglobin by 0.07 g/dL but reduced the mean hemoglobin by an estimate 0.89 g/dL in HIV-infected men. Both HIV-infection and low GFR increased the variance. Lower CD4+ and higher CRP also were associated with lower hemoglobin.

Conclusions: HIV-infection and poor renal function have a combined negative impact on average hemoglobin and increase the percentage of men with relatively low hemoglobin values. Inflammation may mediate the effects of HIV/C0D on hemoglobin.

Presenting author email: aabraham@jhsphs.edu

WEPE0143
Older aging, lack of immunorecovery and exposure to boosted-PI as main determinants of renal impairment in HIV patients during cART
P. Marconi, P. Lorenzo1, M.P. Trotta, M. Zaccarelli, A. Ammassari, P. De Longis, U. Visco-Cam大理石, G. Steinucci, L.P. Pucillo, A. Antinori, for the INMI Clinical Cohort
National Institute for Infectious Disease Spallanzani, Rome, Italy.

Background: In HIV patients (pts), HIV itself, concomitant diseases and drugs, may be all implicated in low renal function in these pts. We prospectively studied HIV naive patients within INMI Clinical Cohort starting a cART, with a measurement of renal function both before cART (baseline) and during follow-up. Renal function was estimated using Modification of Diet in Renal Disease (MDRD). All patients having baseline MDRD Glomerular Filtration Rate (GFR) ≥ 60 mL/min/1.73 m2 were selected. RI was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected.

Methods: Retrospective and prospective cohort studies were conducted. We enrolled HIV-infected adults who initiated TDF between January 2007 and October 2009. Renal function decline was defined as a 25% decrease in glomerular filtration rate (GFR) from the baseline using the Simplified Levey modification of diet in renal disease (MDRD). All patients having baseline MDRD Glomerular Filtration Rate (GFR) ≥ 60 mL/min/1.73 m2 were selected. TDF was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected. RI was defined as first of 2 consecutive MDRD Glomerular Filtration Rate (GFR) ≤ 60 mL/min/1.73 m2 were selected.

Results: A total of 950 patients starting cART during 1996-2007 were included (58% male, median age 38 yrs, 35% IDVU; 37% HCV co-infected, 23.4% with AIDS). Baseline median CD4 count and plasma HIV-RNA were respectively 206 cell/mm3 (IQR:232-422) and 4.55 log10 copies/mL (IQR:4.5-5.4). Initial cART was NNRTI-based in 48.6%, PI-based 24%, 21% had TDF in the initial regimen.Fifty-nine events of RI were observed during 2,011 PYFU (RR=2.95/100 PYFU). At multivariate analysis the risk of RI was increased by advanced age, PI/r-regimen, recent calendar year of cART starting, developing ≥2 AIDS events and lower CD4 gain. Higher values of basal MDRD reduced the risk. Tenofovir was not associated with an increased risk of RI.

Presenting author email: rasal@mahidol.ac.th

WEPE0140
The relationship between hemoglobin and kidney function in HIV-infected men
A.G. Abraham1, 2, F.J. Palestine1, 3, X. Li4, M.M. Estrella1, L. Kingsley5, M. Witt1, L.P. Jacobson1, 2
1Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, United States. 2Northwestern University Feinberg School of Medicine, Chicago, United States. 3Johns Hopkins School of Medicine, Baltimore, United States. 4University of Pittsburgh, Pittsburgh, United States. 5Harbor-UCLA Medical Center, Division of HIV Medicine, Los Angeles, United States.

Background: Kidney disease incidence is on the rise in aging HIV-infected populations. The degree to which HIV infection, a risk factor for anemia, may influence kidney disease incidence among HIV-infected men is unknown. In this study we characterized the impact of HIV infection and renal disease on the distribution of hemoglobin levels.

Methods: Men from the Multicenter AIDS Cohort Study were included in the analysis if they had two consecutive visits with a hemoglobin value greater than 13 g/dL.

Conclusions: Risk of developing RI should be considered a relevant issue in HIV+ patients starting a cART. Renal function monitoring is advisable especially in patients with advanced age, lack of immune recovery after cART and treatment with regimens containing PI/r.

Presenting author email: mariapaola.trotta@inmi.it

[Table]

Conclusions: Risk of developing RI should be considered a relevant issue in HIV+ patients starting a cART. Renal function monitoring is advisable especially in patients with advanced age, lack of immune recovery after cART and treatment with regimens containing PI/r.

Presenting author email: mariapaola.trotta@inmi.it

Abstract Book Volume 2 | www.aids2010.org
Other adverse reactions and complications of ARV therapy

WEPE0144

The impact of interventions to improve HLA-B*5701 allele screening to reduce risk of abacavir hypersensitivity reaction

K. J. Klepl1, R. P. Harrigan1, R. Barritts1, D. Milam1, B. Yip1, K. Chan1, H. Harriss1, L.J. Akagi1, J. Tost1, R.S. Hogg1, J.S. G. Montaner1
1BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada; 2St. Paul’s Hospital, Providence Health Care, Vancouver, Canada

Background: Screening for HLA-B*5701 allele is recommended before initiating or restarting abacavir to reduce risk of hypersensitivity reaction. Reactions have been reported in previously tolerant individuals, therefore our province recommends HLA-B*5701 screening of all abacavir-treated persons. This study compares the uptake of HLA-B*5701 testing before and after interventions to improve screening.

Methods: In British Columbia, Canada, persons ≥19 years were included if they received ≥1 abacavir prescription between 01-Dec-2007 (when HLA-B*5701 testing became available) and 31-Dec-2009. Abacavir prescription and HLA-B*5701 test records were obtained from provincial databases of all antiretroviral-treated persons. Interventions included: (1) “Dear Doctor” information letter describing HLA-B*5701 testing guidelines (mailed 15-Jul-2009) and physician-specific reminder letters identifying abacavir-treated patients not tested for HLA-B*5701 (mailed 15-Nov-2009). Timing of HLA-B*5701 tests was classified as pre-abacavir, during ongoing abacavir or pre-abacavir restart. A Cox proportional hazards analysis identified risk factors for HLA-B*5701-tested patients tested for HLA-B*5701 on dates before and after interventions. Test for trend by (Table).

Results: There were 1982 abacavir-treated patients, 84% male, median age 44 years. Of these, 1444 (74%) initiated abacavir before 01-Dec-2007. Median (IQR) abacavir duration was 39 (17-64) months. There were 793 infor- mation letters and 162 physician-specific letters regarding 619 patients. The province recommends HLA-B*5701 screening of all abacavir-treated persons. Screening for HLA-B*5701 allele screening to reduce risk of abacavir hypersensitivity reaction.

Conclusions: Information and reminder letters for HLA-B*5701 testing improved overall screening. Follow-up continues.

Timing of HLA-B*5701 test

<table>
<thead>
<tr>
<th>Test</th>
<th>Baseline, before Dear Doctor Information letter</th>
<th>Dear Doctor Information letter</th>
<th>After Dear Doctor Information letter</th>
<th>34-Dec-2009</th>
<th>6 weeks after pharmacy-specific letters</th>
<th>31-Dec-2009</th>
<th>p-value (Cochran-Armitage Trend Test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of abacavir-treated persons</td>
<td>N=1354</td>
<td>N=1267</td>
<td>N=1447</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Tested abacavir start</td>
<td>34% (25.5)</td>
<td>360 (28.4)</td>
<td>424 (29.3)*</td>
<td>&lt;0.05 &lt;0.02</td>
<td>&lt;0.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tested during ongoing abacavir</td>
<td>310 (22.9)</td>
<td>313 (24.7)</td>
<td>467 (32.3)*</td>
<td>0.28 &lt;0.01</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tested pre abacavir start</td>
<td>41 (3.5)</td>
<td>39 (3.13)</td>
<td>48 (3.3)*</td>
<td>&lt;0.04 &lt;0.01</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tested total tested</td>
<td>699 (64.1)</td>
<td>712 (62.27)</td>
<td>839 (64.9)*</td>
<td>0.02 &lt;0.01</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WEPE0146

Hepatic laboratory parameters in the MONET trial: association with hepatitis C co-infection

M. Nelson, A. Hifi, P. Mohammed1, C. Moedling1
1Chelsea and Westminster Hospital, St Stephens Centre, London, United Kingdom; 2Liverpool University and Tibetec BVBA, Pharmacology, Liverpool, United Kingdom; 3Jansen-Cilag, Clinical, High Wycombe, United Kingdom; 4Jansen-Cilag, Clinical, Neuss, Germany

Background: Hepatitis C co-infection may increase the risk of liver enzyme elevations during antiretroviral treatment.

Methods: The MONET trial recruited 1541 patients taking NNRTI or PI-based HAART and HIV RNA < 50 copies/mL. Patients were switched to either DRV/r + 2NRTI or DRV/r + 100 mg OD monotherapy or DRV/r + 100 mg OD + 50 mg BID on DRV/r. ALT was monitored at baseline and every 2 weeks during the trial. At baseline, 22% of HCV negative patients versus 12/129 patients on DRV/r + 2NRTI (9%) were HCV antibody positive. In addition there were four acute HCV infections during the trial, all in the DRV/r monotherapy arm.

Results: The median change in ALT to Week 48 was -2.0 U/L in the DRV/r mono arm, versus 0.0 U/L in the DRV/r + 2NRTI arm. The number of patients with Grade 3 or 4 ALT elevations at least once in the trial (worst grade) was 7/127 (5.5%) in the DRV/r mono arm and 3/129 (2.4%) in the DRV/r + 2NRTI arm. In the DRV/r mono arm, 4/22 patients had ≥1 ALT elevations (18%); 2 elevations occurred during acute HCV infection, and 1/01 HCV negative patients (1%) had ALT elevations. In the DRV/r + 2NRTI arm, 0/12 patients with chronic HCV infection had ALT elevations, and 3/117 (2.6%) of HCV negative patients had ALT elevations. Nine of the 10 patients with follow up data available after Grade 3 elevations in ALT had ALT at Grade 0 or 1 at the most recent visit.

Conclusions: In the MONET trial, elevations in ALT were mainly associated with chronic or acute Hepatitis C infection; elevations tended to be temporary and 9 of the 10 patients returned to normal ALT levels after longer term follow up.

Presenting author email: mknelson@chelsewhts.nhs.uk

WEPE0147

Implementation of a national pharmacovigilance reporting initiative in rural HIV clinics in Northern Nigeria

N. A. Ndlulu1, O. Durosimisi-Etiti2, A. Attah1
1Management Sciences for Health PRO-ACT Project, Clinical Unit, Abuja, Nigeria; 2Aias Foundation, Logistics Unit, Abuja, Nigeria; 3Kogi State Specialist Hospital, Medicine, Lokoja, Nigeria

Issues: Considerable progress has been made in providing global access to antiretroviral therapy (ART), with three million patients currently on antiretroviral therapy (ART) around the world. However, the effectiveness of treatment programmes, particularly in developing countries like Nigeria can be compromised by problems related to toxicity, intolerance, and drug-drug interactions.

Description: Since February 2008, USAID funded MSF PRO-ACT project, supports the provision of comprehensive ART services in 25 rural clinics in northern Nigeria. To improve the reporting of ART adverse events (AEs) of antiretroviral drug therapy (ART), in collaboration with the National Pharmacovigilance Centre (NPC), initiated a pharmacovigilance mentoring program in July 2009. We built the capacity of 51 physicians to improve their skills in the assessment and reporting of AEs of antiretroviral therapy. Training was enhanced by focused technical support supervision and provision of job aids, we retrospectively reviewed registers and assessed provider competence through interviews.

Lessons learned: After six months of implementation, only 21 cases of AEs was reported for 4708 active patients on ART. The most frequently reported AEs were: Anaemia 12(5%); mild to generalized skin rash, often associated with itching 6 (29%); Steven Johnson syndrome 1 (5%); peripheral neuropathy 2 (10%). Most of the reactions started within 6 weeks of commencing therapy. In terms of efficacy, no differences were found in 75% of the Physicians were unable to differentiate between adverse events and immune reconstitution inflammatory syndrome (IRIS). We also observed that high patient load, multiple clinical tasks, and poor motivation impacted on the Physicians ability to recognize AEs.

Next steps: The success and effectiveness of a national pharmacovigilance programme maybe dependent on provider skills, staff motivation and work load in the clinics. Programs should take into account these issues before roll out, as active identification and management of AEs is central to quality management of patients on ART.

Presenting author email: ndlulu@msf.org

Author Index

Wednesday 21 July

Poster Exhibition

Thursday 22 July

Friday 23 July

Late Breaker
WEPE0149
Longitudinal screening for peripheral neuropathy among patients initiating antiretroviral therapy in Mombasa, Kenya
S. Mehta, A. Ahmed, M. Laverty, R. Holzman, F. Valentine, S. Sivapalanram
1NYU School of Medicine, Medicine, New York, United States, 2Abru Medical Centre, Mombasa, Kenya

Background: Peripheral neuropathy (PN) is a common complaint among patients receiving antiretroviral therapy (ART) in resource-limited settings. Using a validated PN screen, we report the incidence of and risk factors for PN among Kenyan HIV-infected adults after ART initiation.

Methods: HIV-infected adults newly initiating ART were screened for PN at baseline (pre-ART) and every 3 months for one year. We used a validated PN screen that incorporated both symptoms and signs (vibration perception and ankle deep tendon reflexes).

Results: Two of 200 patients were excluded for incomplete baseline screens. 31 (15.6%) were excluded because they had baseline PN and 26 because of incomplete follow-up screens. The remaining 141 patients without baseline PN were followed for a median of 366 days (Interquartile range [IQR] 349.5 to 399 days). At baseline, median age was 35 years (IQR 31 to 41 years), median CD4 count was 140 cells/µL (IQR 65 to 208 cells/µL) and median hemoglobin was 9.8 g/dL (IQR 8.6 to 11.5 g/dL). Fifteen (10.6%) of 141 patients developed PN at the incidence density of 4.8 cases/105-person-years (95% CI 2.1, 7.97). Neuropathy-free survival was lower in females than males (relative hazard 2.4, 95% CI 1.08, 62.74, p = 0.04). Incidence density was higher for females than males (5.96 per 100 person-years versus 0.91, rate ratio 6.74, 95% CI 1.13, 163.63, p = 0.02). FN-free survival did not differ by tertiles of age, baseline weight, CD4 count, hemoglobin, initial RRTI backbone, or history of TB treatment. All patients receiving a stavudine-based regimen received weight-based doses.

Conclusions: Eleven percent of patients developed PN during the first year of ART. Women developed PN more commonly than men in our Kenyan population. Further study of clinical and genetic factors associated with this gender difference may help guide development of interventions to reduce PN in women receiving ART in resource-limited settings.

Presenting author email: aabid.ahmed@nkiromani.org

WEPE0150
The role of raltegravir on TCR rearrangement in HIV-infected patients in South Africa

Background: Integrase inhibitor is a new class of therapeutic compound for HIV-1 patients, described as efficient and safe. However functional similarities between HIV-1 integrase and the RAG1/2 enzymes, involved in T-cell receptor rearrangements, suggest possible interactions of integrase inhibitors with thymic function. This study was designed to evaluate the impact of raltegravir-based therapy on thymic function and T-cell homeostasis.

Methods: T-cell homeostasis was assessed at weeks 0 and 24 among virologically suppressed patients enrolled in the ANRS 138 trial, who were randomly assigned to maintain their enfuvirtide-based regimen (M) or to switch to a raltegravir-based therapy (S). In a sub-study (19 and 20 patients of each group), the evolution of T-cell subset numbers and activation was measured by direct 6-colour flow cytometry while thymic function was blinded analyzed through quantification of T Cell Receptor Excision Circles (stRECs and djTRECs) and calculation of the sjTREC ratio. In a second experiment, the evolution of sjTREC frequencies was measured for 162 patients.

Results: In both M and S patients, all CD4+ and CD8+ T-cell subsets (naïve, central, and effector memory) and their activation status showed no significant changes during 24 weeks. In contrast, the sjTREC frequency significantly decreased under raltegravir (median W0-W24 variation: -60.6% for sjTREC and -64.1% for djTRECs in M and S respectively; p < 0.05). Finally, the sjTREC ratio remained unchanged in both M and S groups.

Conclusions: In the absence of increased T-cell activation, the observed decrease in sjTREC frequency under raltegravir might be related to raltegravir-induced decrease of thymic function, which is expected to result in the sclerosis of T-cell repertoire. These data require confirmation on other patient populations.

Presenting author email: jacques.dubregis@pasteur.fr

WEPE0151
Evaluation of renal insufficiency caused by the nucleotide reverse transcriptase inhibitor tenofovir in HIV-infected patients from 2001 to 2009 followed at the center for comprehensive care, St Luke’s Roosevelt Hospital Center, New York, USA
1St Luke’s Roosevelt Hospital Center, Medicine, New York, United States, 2Center for Comprehensive Care, St Luke’s Roosevelt Hospital, Infectious Diseases, New York, United States

Background: Although recent WHO guidelines recommend withdrawing d4T from first-line ART therapy, it remains the NRTI of choice in resource-limited settings. In 2006, WHO recommended decreasing the dose of d4T from 40mg to 30mg to mitigate toxicities, including peripheral neuropathy (PN), while maintaining viral efficacy. We compared incidence and severity of PN in a 40mg and 30mg cohort.

Methods: Patients’ charts from an ART-naive population at a rural clinic in KZN, South Africa were retrospectively reviewed for signs and symptoms of incident PN and were graded for severity using the DAIDS scale. Patients with less than 6 months follow-up or prior history of PN were excluded. Patients enrolled prior to the WHO guideline change in November 2006 were initiated on d4T 40mg. Thereafter patients were initiated on d4T 30mg.

Results: 475 patients were analyzed: 235 in the 40mg cohort (207 py) and 240 in the 30mg cohort (227 py). There was no statistically significant difference in gender, age, nadir CD4 or viral load between the cohorts. Incidence of PN was 78/100 py (95% CI 66-81) in the 40mg cohort versus 43/100 py (95% CI 35-53) in the 30mg cohort (RR 1.8, p < 0.001). There was no difference in the number of severe PN cases between the cohorts: 8.3% in the 40mg cohort and 8.9% in the 30mg cohort (p = 1.0). There was also no difference in time to severe PN between the cohorts (p = 0.22). Multivariate analysis demonstrated an increased risk of developing PN with increasing age and female gender; however, CD4, viral load and weight were unrelated to risk.

Conclusions: Decreasing the dose of d4T predictably lowered the incidence of PN (dose reduction of 30%). There was no increase in frequency of severe PN or the time to developing severe PN. Despite reduction of PN in the 30mg cohort, incidence remains unacceptable high.

Presenting author email: meera@apah.org

WEPE0149
Effects of a reduced dose of stavudine (d4T) on the incidence and severity of peripheral neuropathy in PLHIV in South Africa
M. Pahupa, M.J. Gledby, A. Grobler, F. Karim, G. Parker, S. Gumede, K. Naddor
1Wits Cardiovascular Medical College, New York Presbyterian Hospital, Division of Infectious Diseases, New York, United States, 2Centre for the AIDS Programme of Research in South Africa, University of Kwazulu-Natal, Durban, South Africa

Background: Although recent WHO guidelines recommend withdrawing d4T from first-line ART therapy, it remains the NRTI of choice in resource-limited settings. In 2006, WHO recommended decreasing the dose of d4T from 40mg to 30mg to mitigate toxicities, including peripheral neuropathy (PN), while maintaining viral efficacy. We compared incidence and severity of PN in a 40mg and 35mg cohort.

Methods: Patients’ charts from an ART-naive population at a rural clinic in KZN, South Africa were retrospectively reviewed for signs and symptoms of incident PN and were graded for severity using the DAIDS scale. Patients with less than 6 months follow-up or prior history of PN were excluded. Patients enrolled prior to the WHO guideline change in November 2006 were initiated on d4T 40mg. Thereafter patients were initiated on d4T 35mg.

Results: 475 patients were analyzed: 235 in the 40mg cohort (207 py) and 240 in the 35mg cohort (227 py). There was no statistically significant difference in gender, age, nadir CD4 or viral load between the cohorts. Incidence of PN was 78/100 py (95% CI 66-81) in the 40mg cohort versus 43/100 py (95% CI 35-53) in the 30mg cohort (RR 1.8, p < 0.001). There was no difference in the number of severe PN cases between the cohorts: 8.3% in the 40mg cohort and 8.9% in the 30mg cohort (p = 1.0). There was also no difference in time to severe PN between the cohorts (p = 0.22). Multivariate analysis demonstrated an increased risk of developing PN with increasing age and female gender; however, CD4, viral load and weight were unrelated to risk.

Conclusions: Decreasing the dose of d4T predictably lowered the incidence of PN (dose reduction of 30%). There was no increase in frequency of severe PN or the time to developing severe PN. Despite reduction of PN in the 30mg cohort, incidence remains unacceptable high.

Presenting author email: meerapahupa@gmail.com
WEPE0152

Effect of abacavir on acute changes in biomarkers associated with cardiovascular dysfunction

P. Patel1, T. Bush1, T. Overton1, J. Baker1, J. Hammer2, E. Kopij3, L. Conley4, J. Brooks1, The SUN Study Investigators

Methods: The SUN Study to Understand the Natural History of HIV/AIDS in the Era of Effective Therapy is an on-going prospective observational cohort study of HIV-infected patients enrolled in four U.S. cities. We identified 26 cases who were negative for HLA-B5701 and who had at least two weeks without exposure at one visit and at least two weeks exposure at the adjacent visit to ABC while maintaining viral suppression. We identified 43 controls similarly unexposed/exposed but to tenofovir (TDF). We assessed changes in several biomarkers using stored sera (Figure). We examined the median percent change in biomarkers from unexposed to exposed state among cases and controls compared with the expected assay variability, and compared changes among cases with controls using the Wilcoxon rank-sum test.

Results: Baseline characteristics were similar between cases and controls: 81% vs. 81% male, 67% vs. 63% non-Hispanic white, median age 44 vs. 43 years, and median CD4 count 499 vs. 599 cells/mm³, respectively. Mean exposure times were 22.9 and 4.1 months for ABC and TDF, respectively.

We found no significant changes in the biomarkers from the unexposed to exposed state among cases and controls compared with the expected assay variability. We found no significant differences in changes among cases compared with controls using the Wilcoxon rank-sum test.

WEPE0153

HAART modifications and treatment-limiting toxicities or side-effects: risk factors and temporal trends

N. Pantazis1, V. Paparizoo2, P. Gargalianos-Kakoyiory1, M. Lazaras1, A. Antoniadou1, G. Panos2, G. Katsarou1, H. Sambatakou1, G. Petrikos2, T. Kordossis1, T. Tsoulium1, Athens Multicenter AIDS Cohort Study (AMACS) 1Athens University Medical School, 1st Dept. of Medicine, Athens, Greece, 2Athens University Medical School, Attikon General Hospital, 4th Dept. of Internal Medicine, Athens, Greece, 3University of Minneapolis, Minneapolis, United States, 4Washington University School of Medicine, St. Louis, United States, 5John Hopkins University, Baltimore, Maryland, United States, 6University of Witwatersrand, Department of Medicine, Johannesburg, South Africa, 7University of Athens Medical School, Laikon General Hospital, 2nd Blood Transfusion Centre, Athens, Greece, 8Athens University Medical School, 2nd Internal Medicine Clinic, Athens, Greece, 9Athens University Medical School, Laikon General Hospital, Athens, Greece, 10Laikon General Hospital, Haemophilia Centre, 1st Blood Transfusion Centre, Athens, Greece, 11Laikon General Hospital, Athens, Greece, 12Global Health-HIGH, Boston, United States

Methods: We assessed changes in several biomarkers associated with cardiovascular dysfunction.

Results: Baseline characteristics were similar between cases and controls: 81% vs. 81% male, 67% vs. 63% non-Hispanic white, median age 44 vs. 43 years, and median CD4 count 499 vs. 599 cells/mm³, respectively. Mean exposure times were 22.9 and 4.1 months for ABC and TDF, respectively.

We found no significant changes in the biomarkers from the unexposed to exposed state among cases and controls compared with the expected assay variability. We found no significant differences in changes among cases compared with controls using the Wilcoxon rank-sum test.

Conclusions: HAART modifications are often required due to treatment failure or side-effects. We investigate HAART regimens’ durability and frequency of treatment-limiting adverse events and explore potential risk factors.

WEPE0154

Causes of death in ART-treated adults: a post-mortem study from Johannesburg

E.B. Wung1, T. Omani1, G. Seththako1, R. Doshi1, D. Murdoch3, N. Martinson4,5, C. Feldman6, D. Bangsberg7, W.D.F. Venter1

1Reproductive Health and HIV Research Unit, Univ of Witwatersrand, Johannesburg, South Africa, 2Witwatersrand University, Department of Pathology, Johannesburg, South Africa, 3Duke University, Department of Pulmonology, Durham, United States, 4Pernita HIV Research Unit (PHRU), Johannesburg, South Africa, 5John Hopkins University, Baltimore, United States, 6University of Witwatersrand, Department of Medicine, Johannesburg, South Africa, 7Harvard Medical School/ Harvard Initiative for Global Health-HIGH, Boston, United States

Abstract Book Volume 2 | www.aids2010.org

Background: Early mortality on antiretroviral therapy (ART) is a significant problem in resource-limited settings. However, there are no post-mortem studies of causes of death in ART-treated adults in these settings.

Methods: 25 HIV-infected adults who died on ART after medical admission to a Johannesburg hospital underwent post-mortem sampling of lung, liver, spleen, kidney, bone marrow, lymph node, skin and cerebrospinal fluid. Specimens underwent histologic examination and bacterial, fungal and mycobacterium cultures. A committee of infectious disease specialists and pathologists considered pre-mortem and post-mortem data and reached consensus on causes of death.

Results: Median age was 34 years (IQR 31-40); 14/25 were women; median CD4 count was 56 cells/μl (IQR 28-153); median duration of ART was 51 days (IQR 32-166); and median hospitalization 3 days (IQR 2-10). Disseminated mycobacterial disease was a cause of death in 19/25 (8 M. tuberculosis, 1 M. avium; and 10 diagnosed on histology) and was the immediate cause of death in 11/25. Culture confirmed bacterial infections caused death in 10/25 (4 E. coli, 4 other gram-negative enterics, 3 Clostridium sp, 2 A. Baumanii, and 2 P. aeruginosa); and fungal infections caused death in 5/25 (3 C. neoformans, 1 P. krusei and 1 C. albicans). Neoplasia was a cause of death in 8/25 (5 Kaposi’s sarcoma, 2 B-cell non-Hodgkin’s lymphoma and 1 metastatic carcinoma of undetermined origin). Concurrent pathology was frequent: of the 19 with mycobacterial infection, concurrent bacterial or fungal infection and 9 had concurrent neoplasm.

Conclusions: Disseminated tuberculosis was the leading cause of death in these patients who died soon after initiation of ART. Multiple simultaneous serious pathologies were common. These results emphasize the importance of early post-mortem investigation.
WEPE0155
Anemia and ZDV-based ART treatment in children included in antiretroviral programs in the IeDEA pan-African West African database to evaluate AIDS (pWADA)

L. Renner1, K. Malataste1, F. Dicko2, H. Signaté3, E. Aka4, F. Koutéla5, F. Tanoh6, A. Azondekon7, K. Peterson9, P. Touré8, F. Dabis2, D. Ekouévi11, V. Tortosa3, for the West African IeDEA Pediatric Working Group (pWADA)

Background: There is a risk of anemia among HIV-infected antiretroviral treated children, as ZDV is recommended in first-line antiretroviral therapy (ART) in the WHO guidelines. We estimated the risk of severe anemia after ART initiation according to ZDV-art in children included in the IeDEA West African database (pWADA).

Methods: Standardized collection of data from HIV-infected children (positive PCR < 18 months or positive serology ≥18 months) followed-up in ART program centers included in the pWADA collaboration. Ten clinical centers from seven countries contributed (Benin, Burundi Faso, Côte d’Ivoire, Ghana, Mali, and Senegal). Inclusion criteria were: age > 16 years, and starting ART. We explored the data quality of hemoglobin documentation and the incidence of severe anemia (Hb< 7g/dl, per 100 child-years (CY) of follow-up) according to the first-line ART and its predictors.

Results: As of 12/2009, 2933 children were included in the pWADA collaboration (age range: 3 months to 19.5 years; mean follow-up: 5 years; median CD4 percentage: 13%; 1772 (60.4%) had a first-line ZDV-ART, and 1174 (39.1%) (not missing) had a baseline. 67% of the children with a first-line ZDV-ART had an Hb measure available versus 76% in those not exposed (p=0.0005): the presence of severe anemia was 3.0% (n=38) in children having a first-line ZDV-ART prescribed versus 10.2% (n= 89) in those with (p=0.0001). Over the first-line follow-up, 58.6% of the children had a ≥1 measure of Hb available in those exposed to a ZDV-ART versus 60.4% of those not exposed (p=0.45). 92 severe anemia occurred with an incidence of 2.47 per 100 CY of follow-up in those exposed to a ZDV-ART versus 4.25 in those not exposed (p=0.0005). Anemic base was 10g/dl at baseline was the strongest predictor of anemia.

Conclusions: Several anemia is frequent at baseline and guides the first-line ART prescription in West Africa but its further incidence seems rare among ART-treated children.

Presenting author: etomareniger@gmail.com

WEPE0156
Hepatic safety of darunavir 600/100 in HIV coinfected patients with HAART experience

1Hospital Donostia, Infectious Diseases Unit, San Sebastián, Spain, 2Hospital Donostia, Service of Immunology, San Sebastián, Spain, 3Hospital de Cruces, Infectious Diseases Unit, Baracaldo, Spain, 4Hospital de Basurto, Infectious Diseases Unit, Bilbao, Spain

Background: Protease inhibitors have been associated with an increased risk of liver toxicity in patients coinfected with HBV or HCV. In the POWER study coinfection with HBV or HCV are necessary.

Methods: In 3 reference hospitals in the Basque Country, we have analyzed HAART experienced patients, were treated with darunavir but there was a limited number of coinfected patients. More data on hepatic safety, based on RNA-HCV positivity are necessary.

Methods: In 3 reference hospitals in the Basque Country, we have analyzed HAART experienced patients, were treated with darunavir but there was a limited number of coinfected patients. More data on hepatic safety, based on RNA-HCV positivity are necessary.

Results: As of 12/2009, 2933 children were included in the pWADA collaboration (age range: 3 months to 19.5 years; mean follow-up: 5 years; median CD4 percentage: 13%; 1772 (60.4%) had a first-line ZDV-ART, and 1174 (39.1%) (not missing) had a baseline. 67% of the children with a first-line ZDV-ART had an Hb measure available versus 76% in those not exposed (p=0.0005): the presence of severe anemia was 3.0% (n=38) in children having a first-line ZDV-ART prescribed versus 10.2% (n= 89) in those with (p=0.0001). Over the first-line follow-up, 58.6% of the children had a ≥1 measure of Hb available in those exposed to a ZDV-ART versus 60.4% of those not exposed (p=0.45). 92 severe anemia occurred with an incidence of 2.47 per 100 CY of follow-up in those exposed to a ZDV-ART versus 4.25 in those not exposed (p=0.0005). Anemic base was 10g/dl at baseline was the strongest predictor of anemia.

Conclusions: Several anemia is frequent at baseline and guides the first-line ART prescription in West Africa but its further incidence seems rare among ART-treated children.

Presenting author: etomareniger@gmail.com

WEPE0157
Obesity and immune cell counts in HIV infected women on highly active antiretroviral therapy

D. Adegemi1, S. Shah2, R. Herschow2,3, P. C. Tien4, M. Plankney5, H. Minkoff6, M. Glesby7, K. Earim7, E. Golub8, S. Mehta9, WIHS study group
1CORE Center, Cook County Hospital, Chicago, United States, 2University of Illinois at Chicago, Chicago, United States, 3University of California San Francisco (UCSF), San Francisco, United States, 4G indent University, Washington DC, United States, 5Maimonides Medical Center and State University of New York Downstate, Brooklyn, New York, United States, 6Cornell Weil Medical College, New York, United States, University of Southern California, California, United States, 7John Hopkins School of Public Health, Baltimore, United States

Background: Obesity is common in treated HIV + women and has been associated with chronic inflammation. We explored the relationship between body mass index (BMI) and immune cell counts (CD4 and CD8) in women with well-controlled HIV infection in the Women’s Interagency HIV Study (WIHS).

Methods: Cross-sectional analysis of HIV+ women conducted at visit 28 (April–September 2008). 271 women who had CD4 and CD8 data in the visit immediately before the initiation of highly active antiretroviral therapy (HAART) and had undetectable (UD) HIV RNA the last 3 consecutive visits (visit 26–28) were included. BMI was categorized as normal weight (18-24.9), overweight (25-29.9), obese (30-34.9), morbidly obese (>35). Multivariable linear regression determined the contribution of BMI category with CD4 and CD8, adjusting for demographic (age, race, smoking), clinical (hepatitis C, diabetes mellitus, pre-existing CD4 and CD8 count) and HIV treatment characteristics (duration of HAART, time with UD HIVRNA) which impact immune function. CD4 and CD8 were Square root transformed for the analysis.

Results: As of 28 (mean age = 47 years; 49% were African American, 31% White and 16% Hispanic; 25% were current smokers. 31% were normal weight, 29% overweight, 21% obese and 16% morbidly obese. Mean current CD4 was 637, median CD8 727. On multivariate analysis, BMI category was not associated with current CD4 count. On multivariate analysis, being obese was associated with higher CD8 counts (T value 2.06, p=0.04), as was current smoking (T value 3.04, p=0.001).

Conclusion: Obesity was independently associated with higher CD8 counts but not CD4 counts in women with well-controlled HIV even after adjusting for pre-HAART CD4 and CD8 values. This highlights the importance of identifying obesity as a risk factor for increased CD8 counts in HIV+ women. We have provided preliminary data on the impact of obesity on immune cell counts in women treated with HAART.

Presenting author email: oluwatoyin_adeyemi@rush.edu

WEPE0158
In utero exposure to antiretroviral therapy and effect on birth weight

A. Olotu1, M. Obiefune1, B. Gobir, PMTCT
1Institute of Human Virology, Clinical Division, Abuja, Nigeria

Background: Low Birth Weight (LBW) has been reported as an unfavorable effect of Antiretroviral (ARV) drug exposure in utero. Limited data on this effect in resource limited settings limit programmatic planning for management of LBW infants in HIV clinics.

Methods: A retrospective review of medical charts of 102 infants delivered to HIV-positive mothers exposed to ARV was done in a faith based organization offering HIV services in Nigeria. Data collected include type of regimen, duration of exposure, gestational age and birth weight. Gestational age was determined by date of last menstrual period or earliest ultrasound dating.

Results: Low birth weight was recorded among 28% of the children reviewed while 61% had birth weight between 2.5 and 3.5kg. One fifth (21.6%) of the infants were delivered before 37 completed weeks of gestation while 76.5% were term babies. Range of birth weight among all babies was 1.9 - 4.8kg and mean birth weight among term babies was 2.9 ± 0.6kg (range 2.0-4.8). The mean duration of ARV exposure in utero was 24.7 ± 11.6 weeks (range 9 - 40 weeks) and 13% were exposed to ARV for longer than 26 weeks. Zidovudine and Stavudine based regimen accounted for 72.5% and 16% of all regimens used respectively.

A weak negative correlation was found between duration of exposure and gestational age of all babies (r = - 0.25) and between duration of exposure and birth weight among term babies (r = - 0.18) and between duration of exposure and birth weight among all babies (r = - 0.25). Stavudine use showed a weak positive correlation with birth weight among all babies (r = 0.26) and duration of exposure (r = 0.25). A weak negative correlation was found between duration of exposure and birth weight among all babies (r = - 0.18) and between duration of exposure and birth weight among term babies (r = - 0.25). Stavudine use showed a weak positive correlation with birth weight among all babies (r = 0.26) and duration of exposure (r = 0.25).

Conclusion: HAART use particularly Stavudine may predispose to LBW in HIV+ women, and further studies in resource limited settings are needed.

Presenting author email: dotun.ihv@gmail.com
WEPE0159

Renal lesions of 29 kidney biopsies in the era of antiretroviral therapy among Thai HIV-infected patients

W. Prasertwich1, W. Manosingh2, P. Paeasakkon3, S. Elam-on4

1Infectious Diseases Institute, Ministry of Public Health, Nonthaburi, Thailand, 2Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, 3Phramongkutklao College of Medicine, Bangkok, Thailand, 4Chulalongkorn Hospital, Bangkok, Thailand

Background: The varieties of kidney diseases among HIV-infected patients have been emerging after widespread use of antiretroviral therapy (ART). The spectrum of renal lesions manifest differently among the ethnicities.

Methods: To describe the spectrum of renal lesions, clinical course and outcomes in HIV-infected patients who were receiving ART and experienced proteinuria >0.3 g/day regardless renal function who undergo percutaneous kidney biopsy between 2006 and 2008. The renal specimens were obtained by percutaneous biopsies and were studied by light microscopy, immunofluorescence and electron microscopy. The clinical outcomes after 6 months of immunosuppressive treatment were described in immune complex glomerulonephritis cases.

Results: A total of 29 patients with mean±SD age of 49.7±13.8 years and 23 (79%) male was identified. All patients achieved undetectable plasma HIV-RNA and current mean±SD CD4 count was 384±268 cells/mm³. Mean±SD duration between detection of proteinuria and kidney biopsy was 14±5.6±16.3 months. Upon kidney biopsy, 15 (52%) patients had proteinuria with renal insufficiency (i.e., serum creatinine ≥ 1.5 mg/dL). Co-morbidity included 18 hypertension and 10 type II diabetes mellitus. All pathological findings (32 findings from 29 specimens) were categorized into 3 groups. Group I: Immune complex glomerulonephritis (22, 69%) included 8 Mesangial proliferative IgM nephropathies, 6 Focal segmental glomerulosclerosis, 6 Mesangial proliferative IgA nephropathies, 2 membranous nephropathies. Group II: Lesions related to HIV treatment (5, 16%) included 3 tenofovir nephrotoxicities and 2 acute interstitial nephritis. Group III: Others included diabetic nephropathy (3, 1%), lupus-like glomerulonephritis (1, 3%), and postinfectious glomerulonephritis (1, 3%). Treatment outcome after 6 months of immunosuppressive treatment in 22 immune complex glomerulonephritis cases were: 6 complete remission, 9 persisted proteinuria and 7 turned to chronic kidney disease.

Conclusions: The HIV immune complex kidney disease is the most frequent pathological finding in HIV-infected patients while receiving ART. Further study in term of immuno-pathogenesis is needed.

Presenting author email: drwisit_p@yahoo.com

WEPE0160

The transition clinic: a model of care for perinatally infected young adults

J. Knight1, O. Aiao2, E. Kang1, J. Schlecht1, S. Manthramer1

1Columbia University in Affiliation with Harlem Health Center, Medicine, Infectious Diseases, New York, United States, 2Columbia University in Affiliation with Harlem Hospital Center, HIV Mental Health, Family Care Center, New York, United States

Background: The transition of HIV-infected adolescents from pediatric to adult medical care creates challenges for patients and providers alike. The familiar faces of staff, medication adherence, the dual prisms of chronic pediatric illness and emerging adulthood. At Harlem Hospital Center, the transition of pediatric patients directly into adult care met with poor adherence to medications and appointments.

Methods: In February 2009, the Harlem Hospital Center’s adult HIV clinic collaborated with its pediatric counterpart to start a dedicated clinic for recently transitioned patients. In this model, a chart review was conducted to compare the rate of adherence to medications and appointments between patients that transitioned to the transition clinic vs patients that continued in the pediatric clinic.

Results: 7 young adults, 4 male, 3 female, all African American, with a mean±SD age of 25 (range 21 to 30) years, enrolled in the transition clinic. All had more visits in the first year of the transition clinic (median n=13) than in their previous year of care (median n=7) All were treatment-experienced on HAART (median CD4= 96). Prior to the transition clinic, 3/7 patients had a current CD4 count >100. One patient had a viral load of <50 copies. 12 months later, 5/7 patients had a CD4 count >100 and 3/7 patients achieved viral suppression.

Conclusions: The model of care for perinatally infected young adults to address their specific medical and psychosocial needs was associated with improved appointment adherence and clinical outcomes.

Presenting author email: jknight@columbia.edu

WEPE0161

HIV-1-infected individuals with suspected A/H1N1 influenza at the São Paulo STD/AIDS Reference Center

A.T. Vigg1, M.L. Mello1, L.F. Jamal1, R.A. Fraissat2, M.A. Hong3, R.L. Rodrigues1, R.C.S. Oliveira1, S. Araújo1, A. Luchi1, T.G. Sampaio1, S.Q. Rocha1, R.A. Souza1, M.C. Gianna1, L.F.M. Bradford2

1Centro de Referência e Treinamento em DST/Aids, São Paulo, Brazil, 2Instituto Adolfo Lutz/Secretaria de Estado de Saúde de São Paulo, São Paulo, Brazil

Background: Brazil and others South America countries had experienced early influenza A/H1N1-2009 pandemic that had shown a greater transmissibility and atypical photogenic features compared to seasonal cases. Its evolution among people living with HIV/AIDS was a major concern and studies to subsidize next season impact are limited. Our study evaluates the clinical evolution of influenza A/H1N1 among HIV-infected individuals.

Methods: Retrospective evaluation of HIV-1-infected patients presenting with flu symptoms at the CRT Fast Track Clinic (CRT-PA). Cases were managed according to the institutional protocol for A/H1N1-2009. All patients underwent influenza virus swab (A/H1N1 or seasonal) virus diagnosis, performed by a CDC-modified RT-PCR protocol.

Results: From July 15th to November 10th, 2009, 113 individuals HIV+ (+) with flu symptoms were seen at the CRT-PA. All cases were tested by RT-PCR, and 104 results were conclusive. 15% female, 85% male, 74 male and 74 female were seen; 33% were 25 to 39, and 61% 40 to 59 years old. Among them, 20 (19.2%) were positive for A/H1N1-2009, (7.6%) for seasonal virus, and 77 (74%) negative for both. Most patients (96%) received Oseltamivir at entry. All the 34 (34%) patients that needed inpatient care had good clinical outcome, without the need for respiratory care. No fatalities were observed. Among 76 cases with a CD-T cell count from the past 6 months before the beginning of symptoms, 19 (25%) were CD+T cell count <200 cells/mm³.

Conclusions: The positive rates of confirmed A/H1N1 in HIV-positive patients were similar to HIV negative individuals reported by both State and National databases. Although the clinical outcome among these HIV+ individuals with access to oseltamivir was benign. Presenting author email: ar-viso@uol.com

WEPE0162

Neutropenia during 216 weeks of AZT-based anti-retroviral therapy among HIV infected patients in Africa in the DART trial


1JRC, Clinical, Kampala, Uganda, 2Joint Clinical Research Center – Uganda, 3Data, Kampala, Uganda, 4MRC Clinical Trials Unit, London, United Kingdom, 5MRC Entebbe, Entebbe, Uganda, 6University of Zimbabwe, Harare, Zimbabwe, 7Joint Clinical Research Center- Uganda, Kampala, Uganda, 8Univ of Zimbabwe, Harare, Zimbabwe, 9Imperial College London, London, United Kingdom, 10MRC Clinical Trials Unit, London, United Kingdom, 11Infectious Disease Institute, Kampala, Uganda, 12MRC Clinical Trials Unit, London, United Kingdom

Background: Neutrophil counts are known to be lower in uninfected Africans than in other populations. Neutropenia is also a known side-effect of zidovudine and increases the risk of severe bacterial infections (SBI).

Methods: 3316 previously untreated HIV-infected adults initiated zidovudine-containing ART in the DART trial. We estimated the prevalence of grade 4 (≤0.5 x 107 cells/μL) neutropenia at twelve-weekly scheduled blood counts to 216 weeks, and outcomes in terms of grade 4 neutropenia, SBI and death. Associations between baseline factors, grade 4 neutropenia and concurrent SBI were identified using multiple logistic regression.

Results: Of 57,740 scheduled tests, 1155(2.0%) were grade 4 neutropenia, occurring in 773/3716(23%.) participants, with 124(3.3%) having 2 or more grade 4 measurements and 11(0.3%) grade 4 at baseline. The first grade 4 neutropenia occurred at median(range) 12[0,216] weeks after ART initiation; the median duration of all grade 4 episodes was 8[14.64] days. 45 participants(4.8% episodes) died without resolution, 93.7% of episodes resolved, and 1.6% were still ongoing at week 216. Zidovudine-containing therapy was stopped or substituted in 233/1155(20.9%) episodes; the participant had concurrent grade 3/4 anaemia in only 15 episodes. Grade 4 neutropenia was associated with a 28% (OR=1.28 [95% CI=1.1-1.4]) increased risk of SBI. Participants with lower baseline CD4 count (per 2.7-fold CD4 higher OR=0.75 [95% CI=0.70,0.81]); body mass index (per 1 kg/m² lower OR=0.92 [0.87,0.96]); Haemoglobin(per 0.25/dl higher OR=0.77 [0.65,0.90]); Neutrophil count (per 0.25 higher to 1.375x10³/μL (OR=0.61 [0.50,0.77]), who were males(vs female OR=0.78 [0.65,0.96]) and on cotrimoxazole (OR=1.35 [1.12,1.62]) were more likely to develop neutropenia.

Conclusions: Grade 4 Neutropenia (≤0.5x107 cells/μL) most commonly occurs during the initial 12 weeks AZT-based ART among patients in Africa. The risk of severe neutropenia increases with advancing CD4 and Cotrimoxazole. Grade 4 neutropenia was associated with an increased risk of SBI and in a large majority of patients the neutropenia resolved without ART substitution.

Presenting author email: saifilhan@yahoo.co.uk

Abstract Book Volume 2 | www.aids2010.org
WEPE0163
Workplaces as avenues for HIV prevention and the protection of equity, rights and just organizational governance
S. S. Akhtar1, E. Pereira1, F. David1, Y. Flemming1
1Stop AIDS Now!, Managing HIV and AIDS in the Workplace, Bangalore, India
2India Worksite Programs, Bangalore, India
3UNAIDS, India, 4Stop AIDS Now!, Amsterdam, Netherlands

Background: In India, employees with cancer or diabetes are looked upon sympathetically while their peers with HIV commonly face rejection, discrimination and even loss of their jobs. We hypothesized that efforts to break down HIV stigma in workplaces and to set up HIV workplace policies will enhance HIV prevention and the pursuit of rights, equity and just organizational governance.

Methods: We implemented a large scale HIV workplace programme in South India, supporting 50 CSOs to respond to HIV in their workplaces. We carried out a baseline study of their responses followed by intervention research at year 2 and 3. CSOs used participatory methodologies for drafting policies, and consulting with staff and board members, including translation into local languages.

Results: We interviewed 237 staff representing 24 CSOs across three states. 56% were women. The mean age of respondents was 34 and average work experience of 6 years:
- 80% felt open to talk about HIV with colleagues.
- 84% respondents felt very or moderately comfortable accessing condoms from workplaces.
- 80% reported personal behavioural change, with increased preventive measures against HIV infection.
- 88% felt they would keep their jobs if HIV-positive, and trusted their organisation would maintain confidentiality if they were HIV-positive.

Conclusions: These results demonstrate that the CSOs’ participatory processes to tackle stigma and promote workplace HIV policies have had highly positive and lasting impacts on staff perceptions. Low-cost approach in a low HIV prevalence setting has improved the CSOs’ ability to manage HIV and their staff members’ ability to protect themselves from HIV infection. Their capacity to implement prevention work at community level has also been enhanced. Future research will assess if positive changes to date are realised in their organisation, decrease in recidivism and in the spread of HIV in penitentiary facilities. Therefore the development of programmes on resocialization, prevention and treatment will support a sustainable response to HIV/AIDS epidemic.

WEPE0165
Implementing an HIV/AIDS workplace policy in a developing country: TASO Uganda experience
H. Katuube1, D. Namusoke1, J. Brungi1, A. Mucunguzi2, K. Kusenerewa2, A. Nirosyoyo3
1The AIDS Support Organization (TASO), Human Resources & Administration, Kampala, Uganda
2The AIDS Support Organization (TASO), Programs & Strategic Information, Kampala, Uganda
3The AIDS Support Organization (TASO), Programs, Strategic Information, Kampala, Uganda

Issues: HIV/AIDS has become a workplace issue as more people are living and working with HIV ever before. The pandemic has affected productivity, recruitment, training, retention, and increased absenteeism and costs of medical bills. The AIDS Support Organization (TASO) developed an HIV/AIDS workplace policy to manage the impact of HIV/AIDS within TASO, through provision of treatment, care and support to staff and their families.

Description: In 2007, TASO designed an HIV/AIDS workplace policy to manage the impact of HIV/AIDS within TASO, through provision of treatment, care and support to staff and their families. The policy ensures staffs are working in an environment free of discrimination, stigmatization and that HIV status does not constitute a reason for not employing an individual for positions within TASO. There are positions designated for HIV-positive persons e.g Day Centre Supervisor. TASO also provides training and guidelines for preventing occupational exposure of HIV in addition to providing post exposure prophylaxis to all exposed staff.

Lessons learned:
- Increased awareness of HIV/AIDS prevention through appropriate, targeted education programs and regular updates about HIV/AIDS.
- Reduced absenteeism because of easy accessibility of medical care, and enormous psychological support received from fellow staff without discrimination and stigmatization.
- Need to emphasize compliance to policy and procedures and in the event of non-compliance, appropriate consequences and disciplinary procedures should be initiated as provided for in the Staff Code of Conduct.

Next steps: It’s important for policy makers at the work place to integrate HIV policy into the day to day activities of the organization and that all staff comply if it is to be successfully implemented.

Presenting author email: katuube@tasouganda.org

WEPE0166
Engaging prison staff in provision of HIV education in Latvian prisons
E. Dompalma, S. Rotberga
United Nations Office on Drugs and Crime, Project Office for the Baltic States, Vilnius, Lithuania

Issues: Introduction and expansion of HIV/AIDS prevention in prisons is a very important target of the project run by the UNODC Project Office for the Baltic States. Although prevalence of HIV among prisoners is 32 times higher than in the general population, there is no systematic approach to HIV education and harm reduction in Latvian prisons.

Description: Since late 90ies, HIV education in prisons has been occasionnally provided by NGOs or external consultants. In 2008, within UNODC small grant scheme 5 prisons received funding for development and implementation of education programmes on HIV and harm reduction. To ensure quality of interventions, training materials were developed and regular supervision was organized by UNODC in cooperation with a NGO. In 2008-2009, 5 out of 11 prisons in Latvia developed their own education programmes and trained 488 inmates. Education was conducted by prison psychologists, social workers and health care staff.

Lessons learned: The project demonstrated that prisoners trusted the staff conducting the training and openly discussed even sensitive topics like drug use and sexual behavior. It is important to provide regular training and supervision for prison staff implementing HIV education programmes. Programmes developed by prison staff are longitudinal, sustainable and have received positive assessment from inmates. In addition to the acquisition of knowledge and know edge on safe and responsible behavior, the programmes also improved prison environment and interdvision (medical, re-socialization and security units) cooperation. Support from prison authorities is essential to ensure effective implementation and sustainability of new health education initiatives.

Next steps: All prisons who developed new education programmes continue to educate inmates and prison staff after the end of grant. Two other prisons have expressed willingness to start similar activities.

Presenting author email: evija.dompalma@unodc.org
WEPE0170
Assessment of the impact of HIV/AIDS interventions in the private sector in Zimbabwe
E. Serina1, M. Mnhoyi2, P. Makondesa3
1International Labour Organization, TLO/AIDS, Harare, Zimbabwe
2University of Zimbabwe, Centre for Population Studies, Harare, Zimbabwe
3International Labour Organization, Lilongwe, Malawi

Description:
The private sector remains central to HIV prevention in Zimbabwe, however up-scaling of workplace programmes requires evidence of their effectiveness. To this end, a survey of companies in five major cities was undertaken to assess the impact of workplace HIV interventions.

Methods: The sample was selected 2000 women (71% male, 29% female) randomly selected. Of these, 1,240 were from companies with workplace programmes and 760 from companies without workplace programmes. Key informant interviews were used to collect qualitative data.

Results: Workplace programmes impacted positively on HIV/AIDS knowledge, attitudes, practices and behaviour. Workers who benefited from these programmes were more knowledgeable about modes of transmission and prevention strategies. Workers not reached by HIV interventions were more “macho” in their attitudes to male sexuality. 38% of these workers found it natural for men to have multiple partners while compared to 25% of the workers in companies reached by HIV programmes: 34% compared to 28% among other workers. VCT uptake was also higher among these workers: 66% of workers in companies with programmes who had taken an HIV test as opposed to 49% in companies without a programme.

Conclusions: The study showed that workplace programmes reduced productivity losses caused by HIV-related illness, absenteeism and death. Multi-skilled was identified as a coping strategy. 85% of the workers in company programmes reported having been multi-skilled compared to 58% in companies without programmes. Evidence-based workplace programmes have a positive impact on both the workers and the companies. They improve workers’ understanding of risk, influence behaviour change and increase uptake of prevention services, as well as improving productivity and profitability.

Presenting author email: makondea04@yahoo.com

WEPE0169
Work hard, play hard: researching MSM at call centres in the Philippines
A. Smith1, J. Macasil2, R. Howard3
1International Labour Organization, Sub-regional Office for East Asia, Bangkok, Thailand
2Bangkok, Thailand
3International Labour Organization, TLO/AIDS, Philippines

Description:
Data was collected through anonymous closed interviews based on questionnaires following the relevant WHO clinical protocols on “Post-exposure Prophylaxis for HIV Infection”.

Methods: The research assessed the risks of occupational exposure to HIV among 360 health care workers at the Kyiv Ophthalmologic Hospital. Data was undertaken to assess the impact of workplace HIV interventions.

Results: The study showed that workplace programmes reduced productivity losses caused by HIV-related illness, absenteeism and death. Multi-skilled was identified as a coping strategy. 85% of the workers in company programmes reported having been multi-skilled compared to 58% in companies without programmes. Evidence-based workplace programmes have a positive impact on both the workers and the companies. They improve workers’ understanding of risk, influence behaviour change and increase uptake of prevention services, as well as improving productivity and profitability.

Presenting author email: howard@ilo.org

WEPE0167
Towards universal coverage in cambodia: expanding HIV control to Battambang prison
S. Souk1, M. Vanna2, M.M. Lang-Alli3, S. Sereyrathanak3
1Catholic Relief Services, Phnom Penh, Cambodia
2Action for Health Development, Battambang, Cambodia
3Catholic Relief Services, Phnom Penh, Cambodia

Description:
We report on a project that was introduced at Battambang prison. Links were drawn between the Provincial Health Department/PHD, referral hospital, and the prison. Three strategies were deployed:
1) Promote VCT through education/referral to the hospital
2) Provide PLHIV prisoners proper care, treatment, support
3) Ensure good coordination and capacity building amongst prison and PHD staff.

Results: VCT provided to 706 inmates (70% prison population) identifying 18 new cases. Total of 25 PLHIV received care/treatment in prison - 100% of inmates having been referred to prison clinics.

Lessons learned: We conclude that training for prison staff is needed to ensure receipt of HIV interventions. The prison could have been a suitable location for offering tailored services to MSM including stress management, confidential counselling on sexual and mental health issues, and support for HIV-positive workers.
WEPE0172 Conversations for change - coping with the stress of the HIV pandemic

M. Clark1, M. Bryan2, T. Nazlick3, C. Bendel4, K. Tanner5
1UN Caritas/UNICEF, New York, United States, 2Mark Bryan & Associates, Pasadena, United States, 3Room4development, Munich, Germany, 4UNDP, New York, United States, 5World Bank, Washington, United States

Issues: In many countries, UN personnel carry a large financial and emotional burden of the pandemic and must supplement where their families cannot. The stress is compounded by working on HIV as a programme issue and, often, proves debilitating. The mandate of the UN remains to help others, yet we must first care for ourselves to best serve our beneficiaries.

Description: Designed as a small workbook, the self-help tool is separated into six “conversations” to engage the reader in exercises to recognize and address personal stress. Chapter 4 deals specifically with HIV and the importance of knowing one’s own serostatus to make healthy decisions. The conversations include:
1. The Value of Reflection (Coping Skills)
2. The Value of Creativity (Problem Solving)
3. The Value of Money Mastery (Financial Management)
4. The Value of Contact (Building of Knowledge of HIV Status)
5. The Value of Understanding Human Behaviour (Conflict Management)
6. The Value of People Skills (Interpersonal Skills)

Next steps: Design and roll-out Facilitators Guide and expanded learning package to best utilize the strength of the workbook and provide further support to personnel and beyond.

Presenting author email: lara@mlsp.gov.ua

WEPE0173 Enhancing infectious disease peer education for federal offenders in Canada

M.B. Pongrac
Correctional Service of Canada, Ottawa, ON, Canada

Issues: Peer education and support for those living with and affected by HIV and AIDS is an effective intervention tool in communities and correctional institutions. The Correctional Service of Canada (CSC) offers a peer education course which trains offenders in the provision of peer education and support for offenders living with and affected by HIV/AIDS and other infectious diseases. While updating/revising the course, CSC incorporated invaluable input from participants, peer workers and course facilitators. The revised course was piloted in several CSC institutions between April and December 2009. Feedback received from participants, peer workers and course facilitators was used to make further revisions to the course content and format.

Lessons learned: Consultation with participants, peer workers and course facilitators is imperative when developing or revising peer education training so that participants’ needs can be met. Through collaborative efforts, a training program was developed which not only maintained the interest of the participants, but ensured that effective transfer of knowledge occurred.

Next steps: Although the final revision of the course is complete, consultation with offenders and facilitators will be ongoing to guide further revisions and ensure that the needs of the participants are being met. Consultation with both program participants and facilitators is considered a best practice and is employed by CSC in the development of its infectious disease and health promotion programs.

Presenting author email: pongracma@czc-scc.gc.ca

WEPE0174 Addressing “historical risk” for HIV among university students in South Africa

J. Lees
University of the Western Cape, Faculty of Education and HIV/AIDS Programme, Bellville, South Africa

Issues: HIV prevention among South African university students has been strengthened by addressing and transforming the legacy of identities and self-understandings constructed and undermined by colonial and apartheid rule.

Description: Overcoming this “historical risk” for HIV among university students at the University of the Western Cape in South Africa has been successful when integrated into the curriculum of teacher education and for students of development studies. The curriculum builds on the notion of ‘becoming’ as central to the work of teachers and development, engaging students into collective processes that allow them to identify and transcend historical and cultural impediments to their health and well-being. Students have been able to understand their relationships to HIV in a different way than that implied in traditional IEC programming, to understand their own pasts and potential futures differently, and have been able to create new personal and collective strategies for navigating past the threat and danger of HIV.

Lessons learned: This concrete and personal approach to HIV prevention illustrates the value and opportunity of creating classroom spaces for personal transformation within a notion still struggling with the challenge of social transformation. Introducing the concept of generativity allows students to recreate themselves with new identities as caring, responsible and generative adults in a manner that inspires safe, caring and responsible behaviour in multiple areas of their lives. Monitoring of student journals and classroom discussion has shown the need to address ‘risk moments’ as phenomena experienced by even the most confident and responsible of students, and that HIV prevention as something that “one cannot do alone”.

Next steps: The results of this five-year teaching engagement has inspired its successful expansion into the University’s in-service teacher education programme for teachers and teacher educators in South and sub-Saharan Africa, and can help us re-think the task of HIV prevention globally.

Presenting author email: jlees@uw.ac.za

WEPE0175 Implementing successful workplace programmes: experiences from multinationals in South West Nigeria

B. Faloye1, I. Taiwo2, U. Okeke3

Issues: Stigmatisation, discrimination, fear of losing one’s job and lack of knowledge and awareness has been mitigating against HIV disclosure and accessing prompt HIV care and treatment in workplaces in Nigeria. Ignorance, and a culture of silence among top management in formulating HIV friendly policies has contributed to this. Confidentiality of HIV test results is also a challenge, as staff fear being victimised and socially excluded.

Description: Advocacy visits were made by the Society for Family Health to top management of a group of companies in south west Nigeria. Meetings lasted over about 6 months. Each meeting included a PLWHIV, who was included in the team to give a face to the HIV epidemic and build interest of management in developing HIV peer education programmes. As a result, companies agreed for peer educators to be trained to conduct peer education sessions. Over a three year period, 150 peer educators were trained in these multinationals and HIV workplace policies were revised. Company staff in clinics were trained in HCT, and the need for confidentiality when testing and disclosing results.

Lessons learned: Knowledge and awareness of HIV prevention, care and support increased through the process of peer education and management support. Staff confidence was built, challenging erstwhile misconceptions of HIV being as a result of ‘sin’. 3,500 people accessed HCT services and staff trust were rebuilt in company clinics. Clinic staff also benefited during the training programmes, building their skills in managing HIV-positive staff in the workplace, and over 100 staff had accessed ARVs.

Next steps: The involvement of PLWHAs in workplaces motivates management and staff to implement HIV programmes, and consideration should be given to employing PLWHAs. Companies should also work towards putting HIV workplace policies in place, this will enhance staff productivity, even in small informal workplaces.

Presenting author email: faloyebimbola@yahoo.com
WEPE0176
Workplace interventions to reduce stigma among nurses, midwives and health care workers (HCW) in Sub-Saharan Africa may be effective in increasing HIV testing and increasing the likelihood that infected HCWs will seek care where employed if infected.

B. Smith, J. Burrage, A. Amoroso, B. Bausell, S. Banshan, F. Guberski, J. Lipscomb, M. Maimbolwa, R. Maro, S. Mawkyusa, N. Smith1, AIDS Relief Nursal Educators, Kenya and Tanzania, University of Maryland, School of Nursing, Baltimore, United States, 2University of Zambia, School of Medicine, Lusaka, Zambia, 3AIDS Relief, Tanzania, Dar Es Salaam, Tanzania, 4United Republic of, 5AIDS Relief, Kenya, Nairobi, Kenya

Background: Morbidity and mortality associated with HIV infection in nurses, midwives and HCWs in Sub-Saharan Africa has had a devastating impact on workforce capacity and has led to discrimination against HIV positive health workers (HCW) in Sub-Saharan Africa. Increasing the likelihood that infected HCWs will seek care where employed if infected. Incidence of testing will predict willingness to seek care where employed if infected.

Methods: A cross-sectional survey was conducted among almost 600 nurses and midwives from 11 Sub-Saharan African countries attending Biennial Conference of the African Midwives Research Network in Nairobi, Kenya (2007) and 7th Biennal Conference in Lusaka, Zambia (2007). Stigma was assessed using 4-item scale from UNAIDS General Population Survey and 8-item scale by Green. In addition, HCW were asked whether they had been tested for HIV and whether they were willing to seek care where employed if infected.

Results: A Kenya conference demonstrated 87% who did not report stigma had been previously tested while 76% who reported stigma had been tested (Chi-square=4.4; p=.032). While 76% did not report stigma were willing to seek care where employed only 51% who reported stigma were (Chi-square=16.2 [1]; p<.001). Finally, 70% who had been tested reported they would be willing to seek care compared to only 47% who had not been tested (Chi-square=7.11[1]; p=.008).

Conclusions: Stigma can profoundly affect HIV testing rates among nurses, midwives and other HCW. In addition, stigma can affect their willingness to seek care if infected. Data will be used to develop interventions to reduce stigma in order to increase HIV-testing and reduce the likelihood they will seek appropriate care and treatment if infected. Such workplace interventions can play a critical role in protecting the health-care workforce capacity in Sub-Saharan Africa.

Presenting author email: bsmith@son.umaryland.edu

WEPE0177
Voces de fe y cultura: integrating faith-based organizations in HIV prevention efforts targeting US Latinos

B. Ros-Elliot, R. Zaldivar, M. Garcia, E. Topye1, Medical Correctional Institute Correction, Bangkok, Thailand, 2Medical Correctional Institute, Bangkok, Thailand, 3International Labour Organisation, HIV/AIDS Program at Workplace, Jakarta, Indonesia, 4Indonesia Employer Association, Jakarta, Indonesia, 5Indonesia Employer Association, Surabaya, Indonesia

Issues: Using a counselling and testing program to educate HIV/AIDS in-mates about self discipline as a key to achieving high levels of adherence to standard HIV/AIDS treatment protocols has been successful in reducing resistance to below 3%. Description: A group of inmates numbering 453 were recruited into a program which required inmates to undergo counselling and pass comprehension tests prior to starting standard ARV formula treatment. They have been followed up monthly for one year. Another study in Thailand with counselling, but no comprehension tests formed the comparison group. The inmates in this program were able to demonstrate a standard ARV formula resistance below 3% after one year compared with the other study which was an open system which demonstrated an ARV standard formula resistance of around 10%. The ARV standard formula resistance was determined by measuring the viral load, which was undetectable or less than 40 copies per ml, and accomplished by over 97% of this study population. This has shown the importance of verifying the comprehension of HIV/AIDS patients to their disease and how to treat it, with their commitment to conform to the treatment protocol prescribed and comply with a monthly follow up program. The adherence was monitored using a closed system in the correctional institute by using a log book, personal individual counselling by nursing staff and peer group support.

Lessons learned: Better outcomes of lower standard ARV formula resistance after one year can be obtained by setting up a tested educational program supported by three way regular follow up. Intensive counselling and comprehension testing results in improved compliance to treatment protocols.

Next steps: Follow up of this population will continue. In addition this program will be extended to other groups such as the new soldiers and delinquents with HIV/AIDS to check for repeatability of results.

Presenting author email: hanveerakot@hotmail.com

WEPE0178
Enhancing the level of program sustainability at company by integrating HIV/AIDS program into human resource management and occupational health care.

E.D. Nwarghi1, A. Subagianto1, International Labour Organisation, HIV/AIDS Program at Workplace, Jakarta, Indonesia, 2Indonesia Employer Association, Jakarta, Indonesia, 3Indonesia Employer Association, Surabaya, Indonesia

Issues: HIV/AIDS prevention program at workplace have faced big challenge in sustaining program in Indonesia. The government released the ministerial decree on HIV/AIDS prevention regulation at workplace in 2004. After four years, in 2008, a national survey showed that only 9% companies have formal policy and regular budget for implementing HIV and AIDS related program. Approximately 91% companies mentioned that they do not have regular budget on HIV and AIDS prevention.

Description: During one year, project developed an integration method for HIV/AIDS program into existing program especially occupational safety and health and regular human resource management program. At 8 pilot enterprises level, all companies insert HIV and AIDS program into the company’s internal training. 6 out 8 of companies developed formal policies and most could demonstrate that the programme on HIV/AIDS was still running even after the project ended.

Next steps: This experience recommends that private sector need to integrate HIV/AIDS program into existing program and particularly program such as OSH and Human Resource Management program. This approach is reinforced to be a national guideline for HIV/AIDS prevention strategy at private sector.

Presenting author email: earlyday@nurangn@gmail.com

WEPE0179
Achieving highly successful treatment outcomes by effective management of adherence to standard treatment protocols for HIV/AIDS in-mates in Thailand using an educational program supported by comprehensive counselling and testing.

W. Harangshar1, P. Areeapinan1, V. Kongpromsuk1, B. Sukkho2, P. Wongprasert1, Medical Correctional Institute, Corrections, Bangkok, Thailand, 2Medical Correctional Institute, Bangkok, Thailand

Issues: Aims of the study were to develop components for a faith-based, Latino-centered, paradigm or grounded theoretical model(s). Ten in-depth interviews among 4 Protestant, 3 Catholic, and 3 Evangelical church leaders, six in-depth interviews with 2 HIV-positive congregants from each denomination; and 12 gender-specific congregation focus groups were conducted. Interviews and focus groups were transcribed and qualitatively analyzed using constant comparison methods and a matrix system that allowed for identification of salient themes as they emerged in the data.

Lessons learned: Analyses led to the development of a faith-based, multi-staged, Latino-centered model to facilitate involvement of Christian faith-based organizations in HIV/AIDS prevention. Project findings, barriers, and focus groups were transcribed and qualitatively analyzed using constant comparison methods and a matrix system that allowed for identification of salient themes as they emerged in the data.

Next steps: The presentation will showcase the model and its potential for implementation and the development of a guidebook to incorporate Christian faith-based organizations in HIV/AIDS prevention efforts targeting Latinos.

Presenting author email: brittrios@gmail.com
WEPE0180
Helping working women to keep themselves save

A. Cisse, P. Lopez-Sali, K. Fall-Diop, N. Sarr-Sow, A. Gaye, L. Kemmogne
International Labour Organization, ILO/AIDS, Dakar, Senegal; Society for Women against AIDS in Africa (SWAAA), Dakar, Senegal; International Labour Organization, Yaounde, Cameroon.

Issues: The HIV/AIDS epidemic in Africa is characterized by its disproportionate impact on women and girls and increases in mother-to-child transmission. The impact is felt in all economic sectors, both formal and informal. To help working women protect themselves, the Society of Women against AIDS in Africa (SWAAA) Dakar, in partnership with the International Labour Organization (ILO), targeted its initiatives at factories employing large numbers of women.

Description: The project aimed at preventing new HIV infections among women and girls through the promotion of voluntary counseling and testing, and the prevention of mother-to-child-transmission (PMTCT) as well as making women aware of the key principles of the ILO code of practice on HIV/AIDS. The implementation of the project was undertaken by members of the SWAAA and HIV/AIDS resource persons in four workplaces. It involved human resource directors, medical and union representatives, peer educators, as well as factory workers.

The project used different approaches according to the needs of the target audience, including: the sensitization of employers, training and educational sessions, VCT campaigns followed by voluntary testing, provided information on access to treatment using information booths to reach workers and the community.

• 32 peer educators benefited from training
• 3,025 people reached through 135 educational sessions
• 1,109 individuals undertook voluntary counseling and testing
• 300 male condors and 500 females were distributed.

Lessons learned: This project allowed us to create a framework for the exchange of experiences, to train new peer educators and to reinforce the skills of existing educators, whilst drawing attention to VCT and PMTCT, raising awareness, and providing testing for workers and the surrounding community.

Next steps: The project will be expanded to reach more female workers in different economic sectors and countries.

Presenting author email: kemmogne@ilo.org

WEPE0181
The Madrid recommendation on prison health protection; what works in the prevention and control of major communicable diseases

I. Molero, B. Van den Berg
World Health Organization Regional Office for Europe, Health in Prisons Project, Copenhagen, Denmark.

Issues: If prisons are not to become breeding grounds for communicable diseases, prevention and treatment must be an integral part of the penal system and links with the public health sector strengthened. Health protection and promotion measures must be in place, addressing the right of prisoners to equivalent health care as available in the community and recognizing the prison environment as a unique opportunity for interventions.

Description: The Madrid Recommendation, main outcome of an International Conference on Prison Health Protection in October 2009 in Madrid (Spain), recognizes the urgent need for a set of health protection and promotion measures to prevent and control major communicable diseases in prison.

Lessons learned: At the conference, over 300 representatives from 65 countries worked on the following set of measures, programmes and guidelines, as reflected in the Madrid Recommendation:

1. Make available alternatives to imprisonment where possible and to reduce overcrowding in prisons;
2. Implement workplace interventions should target all areas of ILO components and workers’ unions should be actively involved in the implementation of interventions with technical support. Male workers are interested in accessing HCT services when provided through interventions coordinated by labor unions.

Next steps: The project is expanding the number of unions on to 9 to reach more workers. Second, enterprises represented by the unions are being mobilized to develop workplace policies acceptable to both management and labor groups.

Presenting author email: idada@aed.org

WEPE0182
Partnering with labor unions to provide HIV counseling and testing (HCT) services to workers at onsite facilities in Nigeria

A.A. Adetoro, I.I. Dada, J.K. Olabisi
Academy for Educational Development (AED), SMARTWork Program, Lagos, Nigeria.

Issues: Knowing one’s HIV status is an entry point for risk reduction counseling and care and treatment services. National programs can intervene to increase, especially men’s, access to HCT, through workplaces. Challenges in increasing workers’ uptake of HCT are several, especially concern on the part of workers about their continued employment should they test positive. Management driven services are a common practice in Nigeria with the risk that workers’ unions might discourage their members from accessing HCT, given concerns about continued employment, stigma, and other associated risks. The co-option of workers’ unions can be a strategy for assuring understanding, motivation and support for HIV testing and follow-up support for workers and their families.

Description: SMARTWork Program managed by Academy for Educational Development/COACH and funded by USAID/Nigeria (PEPFAR) signed subagreements with 5 national labor unions (NUCFLANMPE, NUPENG, NURTW, NUTSTAN and SSANU) and the private business coalition (NIBUCAA) to improve HIV prevention among workers, one aspect being mobilization, increased access and follow-up support for workers to know their HIV status. The project built the capacity of the labor unions to offer HIV education to their members, encompassing ILO-recommended workplace components, including HCT services onsite. The service, provided by NIBUCAA managed mobile HCT team, tested 9,275 workers (70.4% males, 29.6% females) with 175 or 1.88% seropositive (50.9females/49.1% females) between April and December 2009.

Lessons learned: Workplace interventions should target all areas of ILO components and workers’ unions should be actively involved in the implementation of interventions with technical support. Male workers are interested in accessing HCT services when provided through interventions coordinated by labor unions.

Next steps: The project is expanding the number of unions on to 9 to reach more workers. Second, enterprises represented by the unions are being mobilized to develop workplace policies acceptable to both management and labor groups.

Presenting author email: abadetoro@yahoo.com

WEPE0183
Implementing a country-wide workplace HIV/AIDS program through labor unions in Nigeria

I.I. Dada, A.A. Adetoro, J.K. Olabisi
Academy for Educational Development (AED), SMARTWork Program, Lagos, Nigeria.

Issues: Nigeria has the third largest population of people living with HIV. With a national HIV prevalence rate of 4.6%, an estimated 2.9 million persons are infected with HIV. The epidemic is concentrated in the 25-29 and 30-34 age groups with a prevalence of 5.6% and 4.9% respectively. With an estimated 15.6 million individuals participating in the formal and private sector labor force, the workplace is an ideal setting for effectively implementing HIV prevention and policy programs and strengthening linkages to care and treatment for infected persons.

Description: SMARTWork is a three year country-wide project (2008 to 2011) funded by PEPFAR implemented by Academy for Educational Development (AED) in partnership with five labor unions (NUCFLANMPE, NUPENG, NURTW, NUTSTAN and SSANU) and a business coalition (NIBUCAA). SMART- Work is reaching Nigerian workers with a mix of HIV prevention interventions ranging from peer education, GIPA in the workplace, mobile HIV counseling and testing and policy development. Through these interventions - 10,626 workers (70.5% males and 29.5% females) in affiliate enterprises and motor parks were reached through 135 educational sessions, VCT and PMTCT, raising awareness, and providing testing and follow-up support for workers to know their HIV status. The project built the capacity of the labor unions to offer HIV education to their members, encompassing ILO-recommended workplace components, including HCT services onsite. The service, provided by NIBUCAA managed mobile HCT team, tested 9,275 workers (70.4% males, 29.6% females) with 175 or 1.88% seropositive (50.9 females/49.1% females) between April and December 2009.

Lessons learned: Workplace interventions should target all areas of ILO components and workers’ unions should be actively involved in the implementation of interventions with technical support. Male workers are interested in accessing HCT services when provided through interventions coordinated by labor unions.

Next steps: The project is expanding the number of unions on to 9 to reach more workers. Second, enterprises represented by the unions are being mobilized to develop workplace policies acceptable to both management and labor groups.

Presenting author email: idada@aed.org
WEPE184

Preventive comprehensive interventions appear associated with changes in risk behaviours: results from a repeat KAP survey by Apparel Lesotho’s Alliance to Fight AIDS

D. Vanoni1, K. Wallgren2, D. Halperin1, C. Ashby1
1ALAFA - Apparel Lesotho Alliance to Fight AIDS, Maseru, Lesotho, 2Freehouse International, Montese, South Africa, 3Harvard University School of Public Health, Boston, United States, 4Ghana AIDS Commission, Accra, Ghana

Background: Lesotho’s apparel industry employs 40,000 mostly low-skilled workers, 41% of whom are HIV infected and 88% female. Following a baseline survey in 2007, ALAFA initiated a comprehensive workplace HIV prevention programme offering informational campaigns, peer education, condoms, STI treatment and HIV testing, along with HIV treatment services.

Methods: A cross-sectional KAP & seroprevalence survey was conducted in 2009 among 2,792 randomly selected factory workers to assess programme impact. Anonymous interviews were conducted on risk behaviour, along with blood samples. Data analysis included bivariate and multivariate regression to identify relevant contributing factors for HIV prevalence and self-reported behaviour change.

Results: HIV prevalence in the workplace remained stable (2007: 43.2\% [95\%CI:41.3-45.1], vs. 2009: 41.0\% [39.2-42.9]). Behavioural risk factors associated with HIV status included: getting drunk/visiting bars, multiple concurrent partnerships and STIs. Substantial behaviour change was reported in the following areas: Consistent condom use with spouse increased from 12.3\% [10.6-14.0] in 2007 to 27.2\% [25.1-29.4] in 2009, with extra-marital partners from 66.9\% [61.7-72.1] to 80.3\% [75.9-84.6] and with boy/girlfriend from 46.2\% [42.5-49.9] to 61.8\% [58.9-64.4]. Only 10.9\% [9.7-12.0]\% reported experiencing STI symptoms during the last six months compared to 21.5\% [19.5-23.5] in 2007. In 2009, 75.8\% [74.2-77.7] reported having taken an HIV test compared to 40.9\% [39.0-42.9] in 2007. Significantly higher proportions of workers reported never getting drunk (2007: 79.7\% [78.2-81.3], vs. 2009: 84.0\% [82.8-85.2]). No change was documented in multiple concurrent partnerships among workers with a partner. A small decline in casual sex (2007: 20.7\% [19.0-22.5], vs. 2009: 19.1\% [17.3-20.9]).

Conclusions: Comprehensive prevention interventions reinforced by accessible medical services were associated with substantial reported behaviour change after just two years. Emphasis must be given to maintaining and extending behaviour change; in particular to addressing multiple concurrent partnerships among workers with a partner. A small decline in casual sex (2007: 20.7\% [19.0-22.5], vs. 2009: 19.1\% [17.3-20.9]).

WEPE185

The legion know your status campaign: Ghana

W. Ampofo1, C.N.A. Addo1, A. Laari2, R. Dei1, N.A. Addo1
1Noguchi Memorial Institute for Medical Research, Virology, Legon, Accra, Ghana, 2University of Ghana, School of Public Health, Legon, Accra, Ghana, 3University of Ghana Hospital, Legon, Accra, Ghana, 4Ghana Health Service, National AIDS/STI Control Programme, Accra, Ghana

Background: Under the nationwide Know Your Status (KYS) campaign, a specific program for the University of Ghana legion campus was designed. This activity was implemented by a partnership of various institutions of the University of Ghana with expertise in HIV/AIDS care, testing and prevention services.

Methods: Free counseling and testing for HIV was offered twice weekly for staff and students (non-staff) at the University of Ghana. A fixed site on campus for Certified counselors and student peer educators were trained on KYS-Legon specific operating procedures. Mobile services were also conducted at construction sites, markets and departments on campus when requested. Tele- phone hotline services were made available and personal appointments were also accepted. The mobile unit referred to the University of Ghana and Hospital and other health facilities.

Results: At as December 31, 2009, 3189 persons had participated in the Legion KYS with 3185 HSV sero-negative clients. Thirty-nine HSV sero-positive lives are being provided with HIV/AIDS care and support services at the University.

Conclusions: There is a greater awareness within the Legion community of staff, students and others, about the importance of knowing one’s status. This activity has illustrated the ability of strategic partnerships within an academic institution to successfully implement an HIV/AIDS intervention with care and support programs. Due to the dynamic nature of the university population, such a workplace intervention should be routinely/continuously provided.

Presenting author email: wampob@noguchi.mimcom.org

WEPE186

HIV/AIDS prevention program in a detention facility in Florencio Varela, Argentina

M.F. Campos1, C. Quiroga1, M. Vázquez2, M. Rojo1
1Fundación Huesped, Epidemiology and Prevention, Buenos Aires, Argentina, 2Asociación Civil Unión y Solidaridad, Florencio Varela, Argentina

Issues: Argentina is a country with a concentrated epidemic. HIV/AIDS prevalence among prisoners is estimated in 6%. The Penitentiary System reports 2,118 inmates living with HIV and that the amount of people living with HIV that are not aware of their status remains unknown. Therefore, focusing actions on this population will report an important reduction in a high risk group.

Description: We designed and implemented a HIV/AIDS prevention program in detention facility in the Buenos Aires Province. The Unit has a population of 700 male inmates. The principal objective was to set-up a counseling center managed by a group of inmates. A group of 365 was selected and at the ending inaugurating a Counseling Center. The group began the activity elaborating a diagnosis of their own situation. The main problems detected were: there were testing campaigns in the facility but without counseling; there was a lack of knowledge regarding HIV and other sexually transmitted diseases, they use condoms in not their monogamous relationships, but not when they have sex with their steady couples.

Lessons learned: The acceptance of the officers was crucial to gain access to the facility. Although there are many issues that should be improved regarding to the state responsibility in the inmates health a low profile entrance strategy was required in order to allow the project settlement. Inmate’s involvement was higher than expected, especially among those enrolled in education activities and students’ union.

Next steps: The technical assistance from the foundation professionals will continue in order to provide support to problematic situations that could take place during the counseling process. An advocacy strategy will be needed with the purpose of improving health conditions of prisoner’s population.

Project funded by a Switzerland Embassy grant

Presenting author email: prevencion@huesped.org.ar

WEPE187

Initiation of Buprenorphine during incarceration and linkage to treatment upon release

T. Green1, N. Zailer1, A. Parkin1, P. Friedmann1, M. McKenize1, S. Dickman1, J. Rich2
1Brown Medical School/Rhode Island Hospital, The Center for Prisoner Health and Human Rights, Providence, RI, United States, 2Brown Medical School/Miriam Hospital, The Center for Prisoner Health and Human Rights, Providence, United States

A cross-sectional KAP & seroprevalence survey was conducted in 2007 among 2.4 million individuals currently incarcerated in the United States, 200,000 are active opiate addicts who are at increased risk for HIV. Despite their “forced sobriety” during incarceration, most return to drug use immediately upon their release. Buprenorphine (“Suboxone”) is increasingly being used as an opiate replacement therapy in the US and has been shown to decrease drug use, criminal activity, recidivism, and HIV risk behavior.

Methods: This is a single arm pilot study of initiating buprenorphine around the time of release from incarceration and continuing buprenorphine treatment in the community. The population included 44 prisoners with a DSM-IV diagnosis of opioid dependence.

Results: All released patients were successfully linked to community care. All 11 participants who started buprenorphine while incarcerated, none reported any overdose or use of opiates at 6 months follow up compared with 3 individuals and 7 individuals reporting overdose and heroin injection, respectively who began buprenorphine after release. Furthermore, only 6 individuals reported being rearrested at 6 months follow up compared with 9 individuals (initiated buprenorphine prior to release).

Conclusions: Initiating buprenorphine prior to release from incarceration and continuing treatment in the community are both feasible, and can reduce HIV risk behaviors. Providing buprenorphine treatment for prisoners prior to treatment post-release is a promising strategy to decrease post incarceration HIV risk behaviors, as well as reduce drug use, criminal behavior and recidivism.

Presenting author email: samdickman@gmail.com

WEPE188

Effective strategy to scale-up HIV services among injecting drug users (IDUs) in prisons in Bulgaria

T. Varalai1, T. Yakimova1, V. Georgieva1, H. Taskov2
1Ministry of Health, Program “Prevention and Control of HIV/AIDS”, Sofia, Bulgaria, 2National Centre of Infectious and Parasitic Diseases, Sofia, Bulgaria

Issues: Prison conditions can often contribute to the spread of HIV. In Bulgaria, the number of prisoners detained for drug-related crimes and drug use increased up to 10-12% of the total prison population after the 2004 amendment of the Penal Code which criminalized the "single dose" possession. A package of targeted interventions implemented by outside public health service providers are an effective strategy to scale-up for universal access to HIV services in prisons.

Description: The National AIDS Programme identifies IDUs and prisoners as main prevention groups. Since 2006, the Ministry of Justice jointly introduced the regular provision of anonymous HIV testing and counseling (T&C), in all 12 prisons and 2 detention centres. HIV T&C is provided by staff of public health institutions in all prisons in collaboration with T&C service providers. HIV, syphilis and blood group and blood type are also performed. In 2009, they included in the HIV/AIDS patients monitoring system and receive regular follow-up and ARV treatment if needed. In 2009, out of total 9 270 prison positive cases were newly diagnosed in IDUs.

Presenting author email: samdickman@gmail.com
Prevention for the general population

WEPE0189 WEPE0210

A Nepalese HIV prevention program for migrant workers and their spouses

S. Dahal, Nepal Red Cross Society

Nepal Red Cross Society, Junior/Youth Red Cross, Kathmandu, Nepal

Issues: Migration puts women at increased risk for acquiring HIV in rural and urban areas of Nepal. Culturally, women have been negotiating power to have their migrant husbands tested for HIV on returning from India. According to the 2001 census, 589000 Nepalese work as seasonal labor migrants because of unemployment. In return, migrants bring HIV as a consequence. Among HIV tests cases until July 2009, 34% were women, most of them housewives. Reasons for a massive increase in HIV through traditional ways were very difficult to reduce these facts.

Description: The Nepal AIDS Prevention Program of Nepal Red Cross Society has been adopting multi-channeled intervention approach since 1994. The goal of the program is to reduce risks and burdens of HIV/AIDS in vulnerable communities through community mobilization. Traditional approaches like letter writing to migrant workers has been very successful. For this, community women send a letter to migrant spouses covering basic information on HIV/AIDS with standard messages like what is HIV, how it transfers and its prevention measures. 550 letters are dispatched through the postal office annually. Senders add personal messages at its bottom.

Lessons learned: Writing letter has contributed to aware migrants to safeguard themselves and their partners from getting HIV by encouraging interactions on sexual health issues. Learning and Capitalization Study in 2007 revealed that female group members convinced their husband to use condoms during sex when they were back at home. Some youths had collected money in India and sent these letters to other friends in gulf countries. Around 20% migrants reply letters using the postal service and others do by phone.

Next steps: Providing HIV prevention messages through regular social communication practice is very effective. For wider coverage, the intervention could be integrated in other public and development initiatives. Information should be complete, mixed with relevant photographs and purpose of writing letters should be clearly spelled out.

Presenting author email: satoshii@hotmail.com

WEPE0100

Cross-cultural exchange through drama presentations HIV/AIDS prevention model: TASO Uganda’s experience

J. Namakibiwa1, M. Kekuranga2, E. Okode2

1The AIDS Support Organization (TASO), Planning and Strategic Information, Kampala, Uganda, 2The AIDS Support Organization (TASO), Program Management, Kampala, Uganda

Issues: Having diverse cultural beliefs contributed to the spread of HIV infection. Certain cultures call for special HIV prevention interventions/strategies for example, some cultures believe that virgin girls are HIV negative and that having sex with a virgin can heal HIV. It is therefore important to diversify HIV prevention messages targeting the varied cultures.

Description: The AIDS Support Organisation (TASO) is a national Non Governmental organisation contributing to a process of preventing HIV infection, restoring hope and improving the quality of life of persons, families and communities affected by HIV infection and disease. It has eleven service centers and thirteen Min TASO’s with a clientele of over 304,273 across the country. TASO has been involved in the message of HIV prevention through cultural presentations in order to have one message across all cultures. It formed a Drama groups in each service centre that comprised of HIV-positive clients. During the presentations, some of the performances are presented in local languages depending on the audience for people to understand the messages well. The presentations in each region is the major part of the country i.e. regional and the national level competition is where all centers and mini-TASO’s with in the region come together once a year for presentation to the public.

Lessons learned: Cultural presentations have helped the public to learn cultural values for different parts of the country and how they affect them. Implementations of organizational programs have changed to match the cultural values in areas of operation; implementers and beneficiaries have jointly recognized and witnessed the process of change in the HIV reduction, stigma and discrimination.

Next steps: Culturally linked Drama presentations deliver a well understood HIV message to the public when integrated in HIV prevention and care programs.

Presenting author email: nankakibiwa@tasouganda.org

WEPE0191

Improved access to services through HIV/SRH integration: experience from Swaziland

P. Ordin

International Planned Parenthood Federation Africa Region, ODGE, Nairobi, Kenya

Issues: HIV prevalence continues to rise in Swaziland, with women in the age group of 20-29 years being the most affected. New infections are being transmitted through multiple concurrent sexual partners, intergenerational sex, mobile population and migration.

Description: Among the youth and adult population in Swaziland, HIV prevalence is at 26%, and 42% among ANC clients. Young girls aged 15-24 are the most affected, with a prevalence of 38.4% compared to 12.4% among boys of the same age. Heterosexual transmission through non-causal partners is the primary source of new HIV Infections. To address these, Family Life Association of Swaziland (FLAS) implemented “HIV/SRH integrated programme”, targeting the youth and adult population for 4 regions: Swaziland September 2009. The strategies used included; dual protection for unwanted pregnancies and HIV prevention, engaging MoH for HIV/SRH policy guidance, Catholic missions for HIV prevention, peer educators for BCC, ICP for HIV treatment and care guidelines and capacity strengthening for service providers, and volunteers as entry points for community based HIV/SRH information and services. Through partnership, FLAS expanded HIV and SRH integration services across the country. More clients are accessing HIV or SRH services prior to the integration. Stigma and discrimination have reduced because clients receive both services at the same site without having to worry about being identified as HIV or SRH clients. However, equipments and capacity of service providers for HIV/SRH integrated services is a challenge.

Lessons learned: Engaging partners is instrumental in expansion of HIV/SRH services to the community. Lack of integrated data collection forms undermined the effective monitoring of the SRH services prior to integration.

Next steps: Evaluate partnership with intention to scale-up HIV/SRH integration as a model for empowering the community, expanding and sustaining the services.

WEPE0192

Measuring access to male and female condoms in Nigeria: Implications for HIV prevention in a generalised epidemic

B. Fakolade1, O. Ezire1, Z. Somda1, D. Ogunbowale1

1Society for Family Health, Research and Evaluation, Abuja, Nigeria, 2Society for Family Health, Field Operations, Abuja, Nigeria

Background: In Nigeria, recent evidence using modes of transmission models suggests that 66% of new HIV infections occur among persons involved in low risk (have one marital or cohabiting partner) and casual heterosexual sex. Key factors responsible for this include low condom use especially among discordant couples. A study was undertaken to determine if access to condoms could be a possible barrier to condom use in states with a high prevalence of HIV.

Methods: This study was designed as part of the 6 year Enhancing Nigeria’s Response to HIV/AIDS programme aimed at improving coverage of effective prevention interventions within high prevalence states. The study evaluated the coverage of male and female condoms in 7 states. Data were collected on coverage and quality of coverage indicators. Coverage was defined as the presence of at least one outlet that sold male or female condoms within a geographical area. Quality of coverage was measured in terms of adherence to predetermined standards of price and promotion. 19 enumeration areas each were drawn from rural and urban areas using probability proportionate to size (PPS).

Results: Findings showed substantial geographical variations in male and female condoms distribution across urban and rural communities and in the different states. Coverage rates varied from 70% to 26 percent for male condoms to 95 percent for male condoms. Female condom coverage was low in all states. Overall, the coverage and quality of coverage rates were much lower in rural communities than in urban areas.

Conclusions: This study revealed that access to and quality of coverage of condoms, particularly female condoms, was low in rural communities where 65% of the population resides. Innovative programmes need to be designed to improve access to and promote use of condoms in rural communities as this is one step to reducing new HIV infections.

Presenting author email: rkfaolade@sfnigeria.org

WEPE0193

Perceptions about AIDS prevention strategies among poor urban dwellers in Kampala, Uganda

P. Kajubi1, E.C. Green2, E.S. Hudes3, S. Kamya1, A.K. Maganda1, B. Heard1

1Makerere College of Health Sciences, Medical School, Kampala, Uganda, 2Harvard University, Center for Population and Development Studies, Cambridge, United States, 3University of California at San Francisco, Epidemiology and Biostatistics, San Francisco, United States

Background: There has been much debate in Uganda about what strategies should be promoted for AIDS prevention and their relative importance. But few recent studies have examined what messages the public is mainly hearing and what they themselves believe to be most important.

Methods: We conducted door-to-door random sampling in two poor, peri-ur-
Lessons learned: We find it is important to let the hotel owners understand the linkages between the condom use and their income, therefore they could voluntarily carry out some concrete actions to provide condoms in the rooms. It is also a good approach to have cheap hotel room users in the educational activities.

Next steps: We will document our practice to let other NGOs replicate it in their places accordingly. We also consider to form the hotel owners but need more investigation beforehand.

Presenting author email: tianjiongtoner@sina.com

WEPE0196

"Jitambue luo" know your HIV status national campaign; a success story from Kenya 2009

A. Ngiru, N. Muruguri

Ministry of Public Health and Sanitation, National AIDS Control Program, Nairobi, Kenya

Issues: Know your status campaign is an initiative which aimed to normalize routine HIV screening at health facilities through provider initiated HIV testing and counselling. The knowledge of one’s HIV status is the entry point to HIV prevention, care and treatment. It was therefore important to come up with a strategy to improve uptake of HIV testing and counselling. This campaign is part of Kenya National AIDS Strategic Plan 3, which targets to test 80% of Kenyans by 2012.

Description: A total of 1,000,000 people were targeted countrywide, after consultations with all regional representatives. This campaign was conducted from November 23rd to December 12th 2009 involving 101 health facilities and 295 community outreach. All clients attending health facilities were offered testing and counseling with an opt out approach. Mobile VCT, outreach and workplace testing were also done. All testing was done using rapid testing algorithm.

Lessons learned: A total of 1,220,340 Kenyans were tested, surpassing the target by 20%, this was due to intensive social mobilizations and sensitization.

Out of this, 854,238(70%) were from community outreach. Among tested 707,215(58%) were females. The total positives were 51,378 (4.2%). Out of these females were 32,311 (64%). Number referred for HIV care and treatment were 42,942 (83.2%). This was due to unavailability of HIV care services in some lower level health facilities. Out of this 20,000 were enrolled for antiretroviral treatment.

Next steps: The campaign was successful in increasing the number of people knowing their status and enrolling into care and treatment. This was shown by the four fold increase in both monthly HIV testing and ART enrolment rates.

We recommend this campaign to continue in order to reduce HIV/AIDS infections and to ensure eligible people are enrolled into care and treatment to reduce morbidity and mortality. Future campaigns will be targeted to specific groups.

Presenting author email: anniewambui@gmail.com

WEPE0197

Reliable data and information on HIV/AIDS from a female perspective at your fingertips - a module of the German Frauenthesungsportals portal run by the Federal Center for Health Education (BzgA)

H. Laranjo, M. Koester

1GSSG - Gemeinnützige Stiftung Sexualität und Gesundheit, Köln, Germany, 2Bundeszentrale für Gesundheitliche Aufklärung BZgA, Köln, Germany

Issues: In Germany, less than 18% of all PLHWA are female. Due to predominant prevalence and incidence of HIV among men women's issues are often marginalized. Driven by a lack of information, women face an enormous risk of stigma. In order to gather relevant information and to provide easy access to reviewed information the Federal Center for Health Education (BzgA) runs a module for women and HIV/AIDS within its internet platform "Frauenthuesungsportal".

Description: The database of www.Frauenthuesungsportal.de provides online information about a set of health issues. One module of the platform is dedicated explicitly to HIV/AIDS. It offers an overview and stipulates the demand for discussion and further research. Information within the module is made available directly, preferably by internet links. For an utmost degree of transparency all sources, authors and data are being named and categorized. Regular scientific evaluation ensures a usability that meets the users' needs.

Lessons learned: By translating primary prevention ("living without HIV/AIDS") and secondary prevention ("living with HIV/AIDS") the module’s structure is kept simple and easily accessible. Migration and sex work are additional chapters. Short texts inform about the overlaying matrix and allow instant findings of organisations, brochures and other printed or online available material regarding women and AIDS. Quick and targeted research works for interested laypersons as well as for experts. The records listed within the module on HIV/AIDS module (N = 325) are constantly being tested for quality and actuality and updated if needed.

Next steps: Only existing data and material can be covered by the HIV/AIDS module. The Frauenthuesungsportal encourages researchers and community projects to publish more on the female perspective. The additionally available module on STI from a female perspective adds further information to the field of women’s sexual health.
WEPE0198
Factors explaining condom use for rural adults in Malawi
C.P.N. Kapenda1, K.S. Crittenden1, J.L. Nori2, D.L. Jere3, S.I. Kachingwe1, L.L. McCleary4, K.F. Norr5
1Kamuzu College of Nursing, University of Malawi, Center for Excellence in Nursing, Malawi; 2Lilongwe, Malawi; 3University of Illinois at Chicago, Sociology, Chicago, United States; 4University of Illinois at Chicago, College of Nursing, Chicago, United States.

Background: A peer group intervention for HIV prevention using social-cognitive learning increased condom use for sexually active rural adults in Malawi. This paper examines potential mediators of the intervention’s effect on condom use.

Methods: Data come from the final evaluation of a quasi-experimental study which compared adults in a district where the intervention was offered with adults in a control district. Among sexually active adults (n=206, 56% of the total sample), 18.2% reported using condoms in the last 2 months. Using logistic regression, we first entered whether if in the intervention district (50%) and the demographic factors of gender (50% male), if < 30 years (43%), if ≥50 years (17.6%), and if attended secondary school (42%). We then added the intervention effect and condom attitudes (10-items scored % positive, α=.81, mean score 54.8%, positive); safer sex self-efficacy (6 items, range 1-3, α=.54; very confident, α=.81, mean score 2.93, sd=.60), and partner communication index (2 items, if discussed safer sex or using condoms, # items discussed, range 0-2, mean=1.09, sd=.66).

Results: In the first equation, intervention district and demographic factors together explained 12.8% of the variance. Significant predictors included male gender, if < 30 or ≥50 (negatively related), and intervention district (OR = 2.50, CI 1.57-3.97). After adding potential mediators, the variance explained increased to 28.3%. Safer sex self-efficacy (OR 2.75 CI 1.45-5.20) and talking to partner about safer sex and the intervention district effect was reduced (OR = 1.60, p=.068), suggesting a partial mediation. Age < 30 remained a significant mediator but gender and age ≥50 did not. Condom attitudes had no effect.

Implications: Safer sex self-efficacy and talking to partner about safer sex are important mediators of the intervention’s effect on condom use, supporting the social-cognitive learning model. HIV prevention interventions should incorporate methods to improve communication and safer sex self-efficacy among-Malawi adults.

Presenting author email: ckapenda@yahoo.com

WEPE0200
‘Our health’ empowering communities to normalize HIV - implemented by Alliance Lanka and supported by the World Bank South Asia region development market place, project duration was from July 2008 to December 2009
I. Chathuranga
Alliance Lanka, Programme, Colombo, Sri Lanka

Issues: Internal stigma of HIV-positive individuals and society imposed stigma from family members, neighbours and work places of HIV positive persons due to ignorance, lack of proper awareness on reproductive health, STI and HIV.

Description: The project was implemented by conducting 48 Road Side Stands, in identified locations in three districts for interested people to come and obtain information and educate themselves on HIV, STI, Reproductive health etc. Each Roadside stand was held in a particular location for three consecutive days. A questionnaire was administered to each visitor to the Roadside stand to identify the level of knowledge on the subject. 12,130 individuals responded to the questionnaire through the roadside stands.

Counselling, referrals for treatment / HIV and STI testing, issuing of condoms and educating public on HIV and AIDS were carried out through the establishment of Three Peoples’ Centres in the project areas. 515 identified HIV positive persons were trained on positive living and 16 on business planning and management to empower them to live positively and independently. Relevant IEC materials were produced and disseminated including a video on life stories of four HIV positive individuals and a DVD with songs on HIV prevention.

Lessons learned:
• Once educated on HIV people don’t feel stigmatized. In a low prevalence country this type of perception is very rare.
• Many people visit the stands openly. Earlier people were reluctant to be at a place where HIV or condoms were being discussed.
• Supply of clear facts and relevant information with client friendly simple IEC material were helpful to improve knowledge, and encourage people to visit the stand.
• Discussions with HIV-positive persons for those visiting the peoples centres facilitated reduction of stigma.

Next steps:
- Continuation of Peoples centres with an integrated TB / HIV programme
-Expansion of project to other locations islandwide.

Presenting author email: iachathuranga@yahoo.com

WEPE0199
The PEPFAR alcohol initiative: a comprehensive strategy to prevent alcohol-related HIV transmission in Namibia
M. Glenshaw1, N. DeLuca2, R. Adams3, B. Pick4, N. Bock1
1Kamuzu College of Nursing, University of Malawi, Center for Excellence in Nursing, Malawi; 2Lilongwe, Malawi; 3University of Illinois at Chicago, Sociology, Chicago, United States; 4University of Illinois at Chicago, College of Nursing, Chicago, United States.

Background: In Namibia’s generalized HIV epidemic, 26% of adults report transmission in Namibia as a result of alcohol use. The PEPFAR alcohol initiative was designed to: 1) reduce alcohol-related HIV risk. Structural approaches can have lasting impact through consistent media messages and materials will raise awareness. Risks through consistent media messages and materials will raise awareness.

Next steps: and further promote this initiative. The counseling intervention trial will quantify the magnitude and duration of impact.

Lessons learned: - Expansion of project to other locations islandwide. - Continuation of Peoples centres with an integrated TB / HIV programme

WEPE0201
Condom use: contraceptive and preventive issues in young adults population
N. Beitzer1, N. Bajo2, CSF Group
1Observatoire Régional de Sante d’Île-de-France, Paris, France; 2INSERM U918-CESP, Kremlin Bicêtre, France

Background: Condom is today largely used to prevent HIV at sexual debut and at outset of new relationship by young adults in France as in other industrialized countries. However the increase rates of abortion among 15-25yrs old since the end of the 1990’s indicate a lack of contraceptive practices and/or a high rate of contraceptive failure. Condom remains a method of contraception in on-going relationships. Little is used in the general population. We presented data from the 2006 CSF survey, a population-based survey, carried out by telephone in 2006. Participants were selected based on a two stage probability sampling design with post-stratification for age. 1849 women and 1552 men aged 18 to 29 were interviewed. Confidence intervals were calculated, percentages compared and logistic regressions performed according to the sampling design.

Results: Almost a third of women and a half of men aged 18-29 stopped using a condom during the three first months of the first relationship (p<0.005). Another contraceptive method was generally used at that moment, except for 8% of these women and 10% of men. This lack of contraception is more frequent for less educated people, for men and women who use condom as contraceptive at the beginning of the union, and for those who did not talk about contraception before the first intercourse with their partner. No test was made with a non virgin partner for half of men and women when abandoning the condom.

Conclusions: These findings underline the need to explore in more detail the circumstances in which condom use ceases. They suggest that it is necessary to pursue policies promoting condom and other contraceptive method in early sexual life, especially to less well-off young people, and to strengthen the information available on HIV testing and pregnancy prevention.

Presenting author email: n.beitzer@ors-ifs.org

WEPE0202
The answer lies within: exploiting the transformative power of the ‘community conversations’ methodology
M. Musume1, G. Hamukwalo1, M. Mulonda1, F. Wakumelo1, E. Kalaku1, M. Sadlier1
1Concern Zambia, Zambia; 2Concern Zambia, Senega, Zambia; 3Concern Zambia, Kazma, Zambia; 4Concern Zambia, Lusaka, Zambia

Issues: It is generally agreed the HIV and AIDS pandemic in Sub-Saharan Africa has been greatly driven by the underlying issues of social inequalities, culture of silence, stigma and discrimination. This article submits that when dealing with a challenge, such as the HIV pandemic, which is so intertwined
WEPE0203
Act Against AIDS public health campaign
D. Montoya 1,2

1American Institutes for Research, Silver Spring, United States, 2National Latino AIDS Action Network, Leadership Committee, Washington, United States

Background: Act Against AIDS (AAA) is a five-year, multi-faceted communication campaign designed to contribute to the Centers for Disease Control and Prevention’s (CDC) goal of reducing HIV incidence in the United States.

Methods: AAA is being planned and released in phases, many of which are scheduled to run concurrently. Each phase, with its own unique objectives and strategies, will contribute to a strategic partnerships, mass media, and direct-to-consumer communication channels to deliver important HIV prevention messages in a manner designed to be compelling, credible, and relevant. Some campaign phases will base education and awareness needs, while others will address the specific risk reduction needs of the populations at greater risk.

Results: Studies show that some populations have the highest rates of infection and therefore organize their risk or believe that HIV is no longer a serious health threat. Research indicates that individuals who are compliant about the threat of HIV are more likely to practice risky behaviors. Given the economic recession and budgetary cuts for prevention programs, it is paramount that CDC support local HIV prevention efforts by providing messaging and materials.

Conclusions: CDC will review epidemiological data to identify at-risk populations and will develop tailored messaging. At an individual level, the campaign will strive to help people recognize their own risk and take action. At a community level, the campaign will work to create and sustain norms that are supportive of effective HIV prevention, and at a national level, it will seek to remind Americans of the continued toll of HIV in our nation and the need for collaborative action. The campaign will be evaluated and refined over time based on its ability to motivate action, change knowledge and awareness, and ultimately change HIV prevention practices.

Presenting author email: dmontoya@air.org

WEPE0204
"Doing what works well done and tell everyone what you did" - the mass campaigns and media, together in the fight against AIDS in São Paulo City (SP)
L. Oliveira Pinto de Abreu, P. Zavitoski Malavolta, R. Ramolo, E. Neguerra Gagig, B. Souza Aguir, A. Carimi Tanaka, C.E. Girgolaves Goield, M.C. Abbate

Program of HIV/AIDS of the City São Paulo, Sao Paulo City Health Department, São Paulo, Brazil

Issues: Brazil was one of the first countries to stop associating AIDS campaigns with death, in order to give emphasis on prevention (condoms use), information and human rights, respect to sexual diversity and improve the HIV testing. Key factors such as epidemiological data, the participation of civil society, research and specific target guided the process of building a campaign that raising awareness and promoting preventive behaviors, as well attempt to behavioral changes. SP, with a population of almost 11 million of inhabitants, has about 60 more important medias outlets (radio, TV, press and internet), beside community radio stations and newspapers in the neighborhoods, which has enabled the STD/AIDS-SP use through focused communication campaigns.

Description: To achieve these goals, the STD/AIDS-SP conducts mass campaign in specific target as: Campaign as: Armenia’s April, Valentine’s Day, Gay Rights Parades, International Day of Rights against AIDS and for HIV Diagnostics Rapid Test, in partnership with large number of people around. Solid planning (organization, logistics and environments), the STD/AIDS-SP is a multidisciplinary team in partnership with civil society, private companies and the press.

Lessons learned: Considering the earlier diagnosis and condom use are decisive factors in the fight against HIV, a strategic planning of communication actions and its inclusion in the mainstream media, turn them into an effective and enhancer instrument for actions and prevention policies, because it allows access to different messages to a large number of people, besides increase access to first prevention facilities. In 2009, the STD/AIDS-SP performed 177 campaigns and had 138 media inserts.

Next steps: The process so far has demonstrated that internally driven initiatives have greater ability to garner community participation which is a critical component of sustainable development interventions. The major challenges of CC lie in the fact that it departs from prescriptive methodologies offering no incentives to "experts" instead it focuses mostly on tapping local resources, knowledge and skills.

Next steps: The journey to community transformative leadership which facilitates behavior change is always a long one, therefore it is planned that what has gone on in Nalwei will result in a continuous process of community development action on HIV and AIDS based on community networks created by CC for issues identification, exploration, decision making and reflection/ review. Furthermore this process will be replicated in highly traditional and closed societies.

Presenting author email: grace.namukwala@concern.net

WEPE0205
The feasibility of identifying HIV serodiscordant couples in Malawi
F.L. Matchere1, F. Zulu1, J. Kumwenda1, N. Kumwenda1

1University of Malawi, College of Medicine, Johns Hopkins Research Project, Blantyre, Malawi, 2University of NGO College of Medicine, Department of Medicine, Blantyre, Malawi, Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, United States

Issues: Among HIV serodiscordant couples, protection of uninfected partners is important. Although this problem exists in Malawi, it hasn’t received much attention in the literature, or programs. Data is not definitive, only small proportion of serodiscordant couples are actually identified due to a lack of, to unestablished couple-centered HIV counseling and testing systems. Only when serodiscordant couples know their HIV status, will it be possible for them to actively prevent transmission. We describe our efforts, challenges and successes in identifying HIV serodiscordant couples.

Description: From August 2005 to December 2009, as part of HIV Prevention Trials Network, MCOH-JHU began identifying HIV serodiscordant couples in Blantyre and surrounding districts of Malawi. Couples screened for accrual into a trial evaluating ART effectiveness plus HIV primary care versus HIV primary care alone to prevent sexual transmission of HIV to HIV-1 discordant couples. We launched awareness campaigns through public gatherings: markets, churches, matches, CAB and workplace programs. We established awareness links with government and nongovernmental collaborators for referrals from existing infrastructures like ANC, OPD, local STD/HIV clinics, VCT centers, doctors to door test testing programs and other referral networks. We developed a referral incentive program expanding our catchment area to include surrounding districts.

Lessons learned: By December 2009, 807 couples screened, 758 (94%) discordant, 207(27%) enrolled. The most effective strategies were done to door testing (35%) and VCT counselor incentives (45%). Community involvement and local public awareness. Collaborators were key to enhancing couple centered testing. Door to door testing programs were well received in the community and yielded good large numbers. Challenges included lack of community HIV discordance awareness, VCT records alone were unreliable, as couples separated. Incentives for referring sites promoted couple testing and increased referral figures, albeit expensive.

Next steps: Government and NGO collaboration, counselor incentives, door to door testing, promote couple-centered testing and increases public awareness of the issues.

Presenting author email: fmachere@hku.med.mw

WEPE0206
Promotion of condoms among the key population groups, their clients and general population through social marketing strategies
R. Prabhakara

Hindustan Latex Family Planning Promotion Trust, Programme Management Unit, Kerala, Thiruvananthapuram, India

Issues: HIV/AIDS prevention and control activities in Kerala started in the year 1993. Even with multifaceted interventions inline with the National AIDS Control Programme for a decade, the condom market of the State has been stagnant at 20 Million pieces, annually.

Description: The Department for International Development, Government of UK supported in initiating a focused intervention in Kerala between 2004-2007. The project (Kerala Condom Promotion Project) focused on generic promotion of condoms for the control of STDs and HIV among people who involve in multi-partner sex and those who are their regular/ non-regular partners. The purpose of the project was to increase the correct and consistent usage of condoms by ensuring its availability, affordability and acceptability in Kerala. The ‘Marakkakkal! Condom Nallathinu (Don’t forget! Condom is for good)’ communication campaign of the project contributed largely to the growth of condom market.

Lessons learned: Condom market of Kerala has increased from a stagnant 20 million (1994-2004) to 29 million pieces in 2007 (45% growth in 2 years!). As per the Behaviour Surveillance Surveys 2001 and 2006, the percentage of sex workers convinced of the need for condoms for HIV/AIDS prevention increased from 87% to 92.6%. The number of sex workers complaining about partners’ objection and non-availability of condoms as reasons for non-usage of condoms have come down in 2006 to 5.2% (87.9% in 2001) and 9.5% (21.2% in 2001), respectively. The self-risk perception of sex workers has also been increased and 90.5% of the sex workers in (2006) are convinced of the need for condom use.

Next steps: Increase the availability and accessibility of condoms in the wee hours of the day and further reduce the resistance of male population in condom use through focused communication campaigns.

Presenting author email: babyprabhakara@gmail.com
WEPE0207

Efficacy of HIV prevention interventions in developing East and Southeast Asian nations: a meta-analysis

J.V. Tap1, 2, B.T. Johnson1, 2, T.B. Huedo-Medina1, M.R. Warren1, C.P. Michael1, P.E. Carey1, D. T. Burke1, 2, A. M. Storr1, C.R. Huedo-Medina3, K. Picho4, T.B. Huedo-Medina5, H. S. Goldmeier6, M.P. Carey7, B.T. Johnson1, 2

1University of Connecticut, Center for Health, Intervention, and Prevention, Storrs, United States; 2University of Connecticut, Department of Psychology, Storrs, United States; 3Syracuse University, Center for Health and Behavior, Syracuse, United States

Background: HIV/AIDS incidence and prevalence have been on a fast and steady rise in Asia, the most populous region of the world. Many HIV-behavioral intervention trials have appeared in recent years, but with varying effects. As such, the current synthesis evaluated HIV/AIDS interventions delivered throughout developing nations in East and Southeast Asia.

Methods: Systematic searches were conducted using several electronic databases, listservs, and direct communication with authors. Qualifying studies (a) examined risk-reduction interventions in Asia that focused on HIV-risk reduction with some face-to-face interaction, (b) compared a sexual-risk-reduction marker (e.g., condom use, number of partners, HIV/STD prevalence) against a control or a baseline assessment, and (c) presented information needed for effect size calculation.

Excluded were studies that focused on perinatal transmission, Intervention efficacy was determined by examining how effect sizes from 25 interventions (derived from 19 studies involving 16,457 participants) varied by coded intervention and sample characteristics.

Results: Interventions increased condom use, but with widely varying success. Efficacy was higher for interventions (a) conducted in nations with a higher Human Development Index values, (b) with shorter sessions, (c) implemented on multiple levels (i.e., in both individual or small group settings), and (d) that included behavior-change and socio-cultural components.

Conclusions: Results highlight the success of HIV prevention efficacy in Asian nations with the greatest human development needs. This result is encouraging given that greater condom use change can occur when interventions (a) are short, (b) incorporate both individual and group-based delivery modes, and (c) utilize culturally-appropriate components and existing social structures in their implementation. Taken together, these findings underscore the importance of considering economic and cultural diversity across East and Southeast Asia in future HIV prevention efforts. Limitations are discussed.

Presenting author email: judy.tan@uconn.edu

WEPE0209

Efficacy of interventions with behavioral components for HIV prevention in Latin American nations: a meta-analysis

T.B. Huedo-Medina1, M.H. Boynton2, J.M. Croix3, M.R. Warren1, C.P. Michael1, P.E. Carey1, D. T. Burke1, 2

1University of Connecticut, Center for Health, Intervention, and Prevention, Storrs, United States; 2Syracuse University, Center for Health and Behavior, Syracuse, United States

Background: An estimated 1.7 million people were HIV-positive across Latin American and Caribbean nations (LACNs) in 2007, of which 140,000 were newly infected. Recently a critical mass of HIV prevention intervention work has appeared; prior reviews have noted that these trials’ results vary widely. The current work is the first to examine the efficacy of HIV/AIDS interventions targeting people living in LACNs.

Methods: Employed were a wide variety of systematic search strategies of both English and Spanish electronic databases for eligible publications. Qualifying studies (a) examined risk-reduction interventions in Africa that focused on increasing HIV-related knowledge or condom use with some face-to-face interaction, (b) compared a risk-reduction marker (e.g., condom use, number of partners, HIV/STD prevalence or HIV knowledge) against a control or a baseline, and (c) presented information needed for effect size (ES) calculation. Excluded were studies that focused on perinatal transmission contexts or behaviors. Intervention efficacy was analyzed in terms of increased HIV/AIDS knowledge and condom use. Analyses examined how effect sizes from 33 interventions (derived from 26 studies involving 34,597 participants) related to coded study, structural-level, sample, and intervention characteristics.

Results: The interventions increased both knowledge and condom use but with varying success. For condom use, interventions that matched the culture of the sample were more successful and intensive interventions (≥ 3 hours of content) succeeded better when Human Development Index values and income inequality (Gini coefficient) was lower, and when they were conducted in Mexico or the Caribbean.

Conclusions: These patterns reveal that HIV prevention activities succeed best in LACNs where the need is greatest. An implication is that HIV interventionists should integrate components of evidence-based economic interventions. The current results do not suggest optimal intervention length; this and other limitations are discussed.

Presenting author email: tan.huedo-medina@uconn.edu

WEPE0210

Effect of Mano a Mano: an internationally developed HIV self-help program, on self-efficacy and HIV prevention knowledge among Chileans in a socially disadvantaged area of Santiago

L. Ferrari1, 2, 3, R. Canales4, 5, Y. Molina6, M. Bernales7, L. Irazoqui7, P. Repetto7, K. Non7

1Pontificia Universidad Catolica de Chile, School of Nursing, Macul, Santiago, Chile; 2University of Illinois at Chicago School of Public Health, Chicago, United States; 3University of Marci, School of Nursing and Health Alli, Coral Gables, United States; 4Pontificia Universidad Catolica de Chile, School of Psychology, Macul, Santiago, Chile; 5University of Illinois at Chicago, Counseling, Chicago, United States

Background: The HIV epidemic continues to be a critical problem all over the world. In Chile there is an estimate of 38,000 people living with HIV or AIDS, mostly young men. This creates an opportunity to assess the effectiveness of HIV prevention programs which are appropriate to the needs of Chilean. The objective of this analysis was to establish the effect of Mano a Mano on the HIV related knowledge and self-efficacy towards prevention among men in the South East area of Santiago.

Method: Quasi experimental design with 266 men. Baseline and 3 month follow up evaluations were conducted with 158 participants and 118 in the control group, who were living in La Pintana and Puente Alto (South East area of Santiago). The intervention group participated in 4 sessions of 4 hours each, where the contents of HIV prevention knowledge and other related topics were covered. Mixed ANOVA analysis was used to establish the changes among both groups in the pre and post evaluation, controlling by per capita, level of education and religiosity.

Results: Compare to the control group, men in the intervention group started at a lower level of self-efficacy and HIV prevention knowledge, but had significantly higher levels of both at the 3 month follow up evaluation (p < 0.05).

Conclusions: These results showed that Mano a Mano (Hand to Hand) is a self-help intervention piece of an HIV program designed in a developed country (US) and adapted to a population in a socially disadvantaged community in a developing country. The international collaborative intervention considered the delivery of the sessions using the primary health care model and the social cognitive theory for working on the contents.

Presenting author email: blair.t.johnson@uconn.edu

WEPE0211

Efficacy of interventions with behavioral components for HIV prevention in Africa: a meta-analysis

B.T. Johnson1, K. Picho, T.B. Huedo-Medina

1University of Connecticut, Center for Health, Intervention, and Prevention, Storrs, United States

Background: Sub-Saharan Africa accounts for 67% of people living with HIV, 70% of AIDS-related deaths and 91% infections among children worldwide. Many HIV behavioral intervention trials in Africa have appeared, with widely varying effects, which the current meta-analysis attempted to explain.

Methods: Systematic searches used several electronic databases, listservs and direct communication with authors. Qualifying studies (a) examined risk-reduction interventions in Africa that focused on increasing HIV-related knowledge or condom use with some face-to-face interaction, (b) compared a risk-reduction marker (i.e., condom use, number of partners, HIV/STD prevalence or HIV knowledge) against a control or a baseline, and (c) presented information needed for effect size (ES) calculation. Excluded were studies that focused on perinatal transmission contexts or behaviors. Intervention efficacy was analyzed in terms of increased HIV/AIDS knowledge and condom use, and sex partner concurrency. Analyses examined how effect sizes from 72 interventions (derived from 52 studies involving 56,984 participants) related to coded features of the studies, their samples, and interventions.

Results: Interventions significantly improved all of the risk-reduction markers, but efficacy varied widely across studies. For condom use, efficacy was higher for studies (a) conducted in countries with smaller Human Development Index values, (b) with more women participants, (c) shorter sessions, and (d) that did not include HIV testing and counseling in the control comparison.

Conclusions: The current results are encouraging given that behavioral interventions succeeded best in the poorest African nations; economic considerations deserve greater attention coupled with prevention. Additional work is that (a) brief interventions can succeed as well or better than longer ones and (b) findings generalize across samples from adolescents to adults. Future studies should examine how to increase efficacy for African men. Limitations are discussed.

Presenting author email: tana.huedo-medina@uconn.edu
WEPE0211
Implementation of special course “HIV/AIDS prevention for elite athletes”
M. Tshshmarityan
Armenian State Institute of Physical Education, Physiology and Sports Medicine, Yerevan, Armenia

Issues: For reducing the spread of HIV infection in the Republic of Armenia, the government of Armenia developed and approved the first National Program on HIV/AIDS Prevention in 2002. The main goals are to develop and implement the national policy on HIV/AIDS prevention and treatment, carry out educational programs for various stratum of population, etc. The results of the surveillance, conducted by national centers and institutions, reveal low level of HIV/AIDS prevention knowledge among youth.

The proposed educational program focuses on improving safer behavior and increasing the level of knowledge among young athletes, increasing access to information on HIV counseling and testing services, and preventive means in our country and abroad (condoms, disposable syringes, etc.). Furthermore, the students of the institute get couch diploma and opportunity to apply their knowledge in further work.

Results: The course was attended by 277 students. The monitoring conducted during the past 2 years, revealed that there are positive changes in the development of HIV/AIDS prevention skills and knowledge among elite athletes. Therefore, the results of pre-tests and post-tests showed that the general level of knowledge has increased from 34.46% to 78.87%.

Next steps: A special course will be introduced into the curricula of high grades of Yerevan's secondary school for extraordinary athletes. In 2010-2011 academic years, we will also implement a peer education project: we expect that institute students will teach classes in the above-mentioned secondary school.

Presenting author email: tshman7@yahoo.com

WEPE0212
Childhood abuse and risky sex among homeless youth in Canada: the mediating role of sexual functioning problems
D.R. Schwartz1, C.A. James1, V. Dubov1, G.M. Kostova2, T.A. Hart3, A. Wagner1
1 Ryerson University, Psychology, Toronto, Canada, 2 York University, Psychology, Toronto, Canada, 3 Ryerson University, Toronto, Canada

Background: HIV prevalence is disproportionately high among homeless youth. Childhood abuse is also a common condition among homeless youth. Despite the established association between childhood abuse and risky sex, the pathways underlying this relationship remain unclear. This current study examined whether trauma symptoms mediated the relationship between 3 forms of childhood abuse - sexual abuse (CSA), emotional abuse (CEA), and physical abuse (PA) - and unprotected vaginal intercourse (UVI) among Canadian homeless youth.

Methods: A cross-sectional study was conducted on 412 adolescents (aged 12-16 years) attending a private school in Hyderabad before and after giving an information booklet about HIV/AIDS. A pretested questionnaire was tested among the students and later an information booklet was given and explained in detail and knowledge on HIV was again retested by giving the same questionnaire. The study variables were Knowledge about HIV/AIDS, Transmission, Prevention etc. Statistical analysis was done using proportions.

Results: Of 412 students, 220(53.4%) were girls and 192(46.6%) boys. All heard about HIV/AIDS. When knowledge regarding modes of transmission of HIV was tested 72.3% gave a positive response to sexual route, 40.3% to blood transfusion/needle injuries and 20.6% to mother-to-child transmission. Only 35% had a knowledge regarding prevention of HIV through safe sex practices and only 5% could explain the term safe sex practices correctly.

Conclusions: Knowledge regarding HIV among young adolescents can be improved tremendously by imparting knowledge to them via information booklets and lectures.
WEPE0215
Reality check: a serial drama for airing on public buses in the U.S.

A. O’Leary1, L. Keoingly2, F. Harrison3, L. Willis1, M. Neumann1, K. Henry1
1Centers for Disease Control and Prevention, DNHAP/PRB, Atlanta, United States; 2Centers for Disease Control and Prevention, United States; 3World Health Organization, Geneva, Switzerland.

Issues: In the United States, African Americans share a highly disproportionate burden of HIV infection and disease. Factors contributing to this are numerous, including lack of access to HIV testing, inconsistent use of condoms, HIV stigma, and homophobia. Globally, Entertainment-Education programs such as serial dramas have been shown to affect health behaviors and attitudes.

Description: We developed a hip-hop themed serial drama (soap opera) with 25-minute segments. The theme is African American Characters model, in a compelling and entertaining format, HIV testing, condom use, abstinence, “coming out” to parents, and being HIV-positive. The storylines all take place in the context of the hip-hop music business in Atlanta, Georgia. Some episodes will be shown during the presentation, and others will be available at the conference for viewing.

Lessons learned: Our Community Advisory Boards (CABs), one an adult CAB comprised of community leaders and two youth CABs, one from a Girl and Boys club and another from YouthPride, a service organization for GLBTQ youth in Atlanta, provided invaluable advice on characters, storylines, music and other aspects of the drama.

Next steps: We intend to evaluate this serial drama by airing it on the Los Angeles public bus system and conducting bus stop intercept interviews. Presenting author email: ao01@cdc.gov

WEPE0216
STD/HIV/AIDS related knowledge, attitudes and practices among schoolchildren aged 9-12, Pakistan

L. Marchena1, E. Barrojo1, D. Gutierrez2, P. Arroyo3, Y. Rodriguez4, L. Rivera5, D. Avila6, E. Lee7, R. Coreia7, B. Armien7
1STD/HIV/AIDS Children Study Group, 2Quality Management Institute for Health Studies, Panama, Panama, 3United Nations Population Fund, Panama, Panama, 4Ministry of Education, Panama, Panama, 5Ministry of Health, Panama, Panama.

Background: Panama occupies the third position among Central American countries with high HIV prevalence. Age distribution shows that it affects sexually active working-age population, especially aged 24-34.

Methods: A cross-sectional study was conducted in 25 public schools selected by convenience in 2005. 1296 students aged 8-15 completed a questionnaire regarding demographic, family and social relationships data and STD/HIV/AIDS KAPs. Results were analyzed by frequency and compared to show possible associations. A knowledge score was built to assess levels of awareness and attitudes for STD/HIV/AIDS issues.

Results: The mean age was 10.2 years and the male to female ratio was 1.5:1. Older children reported curiosity as the main reason for engaging in early sexual activity. Family was reported as an important source of information for sexual education, followed by teachers. 13.3% declared a sexual experience of some sort; their mean age was 10.1 years, predominantly males (80.2%). Identifiable risk factors were the presence of a sentimental partner (29.6%), and the preference to discuss sexual issues with a person other than the mother (32.7%). Among those that have had sex, 52.4% of the respondents are female and 47.6% of the respondents are male. 70.6% of them have had sex while 30% have not.

Conclusion: The study shows that 84.4% of the respondents are female and 47.6% of them are male. 70.6% of them have had sex while 30% have not had sex. Chi-square test was used to compare knowledge of HIV prevention and use of condom which shows a significant relationship between them (Chisquare=10.832, DF=2, P value=0.004< 0.005). Among adolescents who had increase use of condoms and among girls with low level of condom use believe it reduces pleasure, does not work, partner will not permit or they have trusted partners and more respondent believe its a sign of lack of trust towards sexual partner.

Lessons learned: The result shows misperceptions of condom use among the adolescent refugees. The focus group discussion revealed that condom use is low among the female adolescent group which is one of the reasons to be concerned about high teenage pregnancy in the camp.

Next steps: Programs aimed at displaced adolescents such a program should be part of an effective HIV-prevention strategy. Young people especially the female ones should be empowered about the importance of protecting their health, knowing their right and condom negotiation skills in order to slow the spread of HIV.

Presenting author email: democha@ic平8@yahoo.com

WEPE0218
Developing youth and PHA friendly service (YPFSS) network to strengthen sexual reproductive health (SRH), HIV prevention, treatment and care system in 43 provinces of Thailand

W. Tungnapasak1, B. Tantisak2, J. Meekhun3, A. Chitwarakorn4, P. Sattasit5
1Presenting author email: democha@ic平8@yahoo.com

WEPE0219
Five years lesson learnt of strengthening national prevention and care of HIV/AIDS project towards aligning care of HIV prevention with government decentralization to achieve coverage and impact: ACHIEVED project for youths in community

I. Jenkson1, S. Suksaum1, S. Panya2, A. Chitwarakorn3, P. Sattasit4
1Principal Recipient Administrative Office, Department of Disease Control, Ministry of Public Health, Nonthaburi, Thailand

Issues: Risk behaviors among youth are able to lead to STI and HIV/AIDS transmission when youths do not understand and unaware of preventive themselves. Thailand has estimated new infections was approximately 10,853 this year (2010). Being recognized by friends and group, youths often demonstrate their behavior irregularly such as sexuality. Presently, there is weird sexual behavior in youth such as sexual collection among youths and trend to be sexualized in younger age.

Description: The contribution among Go, NGOs and civil society 12 Sub-recipients SRHs have implemented safe sex behavior and communication in community sex among adolescents and youths. There are 690,529 youths (94.25%) has received HIV/AIDS preventive knowledge via direct training and through well trained CTW (Community Team Worker). The project had to continuum implementing under “ACHIEVED” project towards behavioral change and life skill based leading to decrease HIV/AIDS infected in youths reduction the age 12-25 years old in Thailand which can reach 90.94% from target in year 1.

Lessons learnt: Monitoring and evaluation has used AARR: After Action Review and Reflection and Coaching as the tools in confirming the preventive knowledge of youth. The project has now integrated the HIV/AIDS prevention project for youths in community by yearly local administrative organizations plan.

Next steps: Establish linkage and integration among sub-recipients in prevention and care such as prevention in community and comprehensive health care on effective social work strategy plan and sustainability. Develop monitoring and evaluation system to integrate into existing health service system.

Presenting author email: ccitra@gmail.com
WEPE0220
Interventions and strategy to mitigate young men in India

V. V. Pandey, Sexual and Risk Behaviour
International Institute for Population Science, GATS-India, Mumbai, India

Background: Adolescents present both a challenge as well as an opportunity with regard to bridging the HIV risk behaviour across different sub-populations. Adolescents are an unprecedented large and growing population with the potential for shaping developing world. With sexual activity often initiated in adolescence - within or outside of marriage - the risk relating to their sexual behaviour is often underestimated. Therefore, this paper focuses on the extent of comprehensive knowledge among young men age 15-24 and the socio-economic and contextual correlates of related risk behaviors in India, which may have top programmatic priorities for designing evidence based interventions.

Methods: Data used in this paper has been taken from third round of National Family Health Survey (NFHS-3), where it is the first time when information on HIV related risk behavior have been collected. Bi-variate, multivariate and logistic modeling statistical techniques are used for the analysis.

Results: Only one-third (36 percent) of the young men in India have "comprehensive knowledge" about HIV/AIDS - a pre requisite for effectiveness in prevention and control programme in any country. Overall 6 percent of the young men reported to have an "intention to have sex before marriage" and study clearly reveals that among the youth who are consuming alcohol and who have frequent mobility are more likely to have an intention for the pre marital sex. Data depict that, though 15 percent of the youth reported to be used condom during their first sexual intercourse, only 7 percent of the never married men report to use condom.

Conclusions: Thus the need to focus on young men and their involvement in the existing HIV/AIDS intervention programs is essential. Intervention programs should focus on enhancing not only the "comprehensive knowledge" but also "condom promotion" and "safer sexual practices". While deciding the re-sources and designing programmatic response to the epidemic.

Presenting author email: vippulaibahv.pandey@gmail.com

WEPE0221
Lessons learned in involving the deaf and hearing impaired in the fight against sexual abuse and HIV in Nigeria

C. Babajide, A. Faloye, S. Ikeokwu, K. M. Ojoye
Society for Family Health, Abuja, Nigeria, Society for Family Health, Field Federation, Abuja, Nigeria, Center for Women and Children Development, Referral Hospital, Alimosho, Lagos State, Nigeria

Issues: Nigeria with HIV prevalence of 4.6% has a large population of deaf, hard of hearing that have been excluded from HIV prevention and management programs. Available data revealed that HIV prevalence among the deaf in Nigeria is greater than among the general population. Efforts made by organizations providing HIV/AIDS services to deaf populations in the country yielded little or no result because most of them lack the resources, strategies, and skills required to effectively involve the deaf. The questions then are; how can the deaf be involved effectively in HIV programs and what are the factors exposing them to HIV.

Lessons learned: The Deaf Society for Family Health and Center for Women and Children Development in 2009 implemented HIV Prevention/management program for deaf in Ondo state - South West Nigeria with the aim of increasing access to NHIV/A and reducing the rate of teenage pregnancy/HIV infection among the group. The 9 months project involved 10 teachers and 500 primary/high school students drawn from 18 LGAs. Participants were thought essential life building skills, effects of sex before marriage and sexual/substance abuse. Communication was through qualified interpreters, group activities, graphic/photographs and diagrams. Baseline assessment was done prior to the commencement of the intervention. Other strategies include advocacy, drama, community mobilization, STI management and referrals. Baseline findings were shared with stakeholders during SFH dissemination workshop.

Lessons learned: There are shortage of prevention and culturally competent providers equipped to serve the deaf population effectively. Lack of culturally prevention/treatment education materials, limited access to interpretation services, limited funds, shortage of qualified interpreters and limited surveillance studies to establish the scope of the epidemic were identified as factors preventing deaf from understanding HIV disease.

Next steps: Effective HIV prevention program for the deaf must involve them in the design and development of materials and in the implementation of HIV programs.

Presenting author email: jobabaje2@yahoo.com

WEPE0222
Aligning care and prevention of HIV with government decentralization to achieve coverage and impact: ACHIEVED project

J. Tenkod, S. Sukasmii, S. Pany, A. Chitwarkorn, P. Sartsit, B. Tantissi
The Principal Recipient Administrative Office, Department of Disease Control, Ministry of Public Health, Thailand

Issues: The project will focus on sexually active youth aged between 12-24 years as a vulnerable population group, since HIV surveillance data continues to show increases in HIV risk behavior incidence as high among this age group. The project aims to be an independent program to implement interventions by using interventions well-developed under the existing grant to cover a "critical mass" of youth, thus influencing the establishment of new norms of protective behavior.

Description: The intervention components consisted HIV/AIDS prevention and care. The implemented result of Year 6 (2008-2009) are 134,714 (90.94%) of youth receiving HIV/AIDS education in workplace setting and 3,207 (2.36%) in the community and 40.50% of schools has provided life skills-based HIV education in the last academic year. Youth and PLHIVs are able to stay condom to 15,427,731 pieces, 11.46% (79.60%) children and adult PLHIVs received care and support from Comprehensive Care Centers and Faith Based Organizations and 3,173 adults and children who were exposed to antiretroviral therapy in accordance with the nationally approved treatment guidelines.

Lessons learned: The project found that schools have integrated the 16 components of comprehensive sexuality education (CSE) into the school curriculum. The preventive in Community has integrated implementing with Comprehensive health care. Clinical research has conducted in collaboration with the Pediatric European Network for Treatment of AIDS (PENTA) and the International Maternal Pediatric Adolescent HIV Clinical Trials Group (IMPAACT).

Next steps: Bring M&E robust and adjust in national HIV plan for monitoring and evaluation all levels in the country. In addition, SRs (Sub-Recipient) and SSRs (Sub-Sub-Recipient) attempt to integrate the HIV/AIDS prevention for youth in community at least setting into local administrative organizations three years plan for sustainability.

Presenting author email: ctitria@gmail.com

WEPE0223
Turning college students into mentors: raising awareness of HIV prevention among children and teenagers by peer-based health activities in Hong Kong

L. H. Kong
Hong Kong AIDS Foundation, Training & Volunteer Coordination, Hong Kong, Hong Kong

Issues: HIV preventive education is never a mandated topic of the regular curriculum in primary and secondary schools in Hong Kong. Although, it has been proved to be critical to STDs/AIDS infection in many countries. This abstract will share the experience of Hong Kong AIDS Foundation (HKAF) in launching a peer education programme to offer sex and AIDS education to schools.

Description: By recruiting 25 college students every year and providing them intensive training on HIV/AIDS knowledge and attitude reflection, sex education, project design and management skills, the Healthy Youth Ambassador (HYA) Programme aims to build a troop of adolescents with all-rounded skills to design and implement AIDS education programmes for children and teenagers. After training, the HYA students will design and conduct their own projects for students aged from 6 to 18. The programmes are tailor-made for each school depending on the ages and levels of students.

Lessons learned: Through interactive and youth-oriented projects provided by our young mentors, students in primary and secondary schools have chance to deepen their understanding of sex and HIV/AIDS, discuss related issues openly, and to alleviate misconceptions. The invention at early age helped reduce children's risks of HIV infection and to promote care and support for people with HIV. The programme also empowers both the educator and the beneficiary by the participatory approach of learning. The personal growth and feeling of self-worth directed them to practice risk reduction strategies.

Next steps: The HYA programme affirmed the viability of training college students to impart prevention messages to mentors and children or younger teenagers. To further consolidate the programme, training and supervision on most updated HIV/AIDS curriculum and skills project in management will be strengthened in order to prepare the HYA students with necessary skills and confidence to convey the HIV/AIDS knowledge to other children and youths.

Presenting author email: jkong@hkaf.com

WEPE0224
HIV prevention for street youth in St. Petersburg, Russia

B. Yarotski, Y. Batulik, A. Shabotaisi, O. Vorobyevski, N. Metelkina, E. King, E. Finnerty, A. Lynch, S. Hedgon, V. Tripathi
HealthRight International, Representative Office, St. Petersburg, Russian Federation, ‘University of North Carolina, School of Public Health, Chapel Hill, United States, ‘HealthRight International, New York, United States

Issues: The estimated number of street youth in Russia is one million, with 10,000 in St. Petersburg. According to a 2006 study, 84.7% of street youth have a history of substance use including alcohol, 32.9% are active IDUs, 33.3% have shared needles, 95.9% are sexually active with risky sexual behaviors, and 37.4% are HIV-positive.

Description: HealthRight developed a behavior change communication (BCC) intervention, entitled STEPS, to prevent HIV among at-risk youth, implemented at drop-in centers and halfway houses. STEPS includes 10 interactive one-hour sessions on topics such as hygiene, STIs, HIV/AIDS, violence, drug use, pregnancy and contraception. A multi-tier incentive system is used to encourage participation. Visual aids and information materials adapted to the cognitive abilities of street youth were developed to supplement the curriculum. In 2008-2009, 456 youth participated in STEPS training in Russia.

Lessons learned: An independent evaluation documented significant improvements in participants' HIV knowledge, confidence in skills needed to protect themselves against HIV infection, attraction of HIV-positive people; for example, HIV knowledge increased by a mean of 29% among participants, and refusal skills increased by 55%. Follow-up four months after the evaluation showed that improvements in HIV prevention and care interventions such as the STEPS curriculum, can be successfully integrated into government social protection institutions. However, street outreach with mobile VCT is best implemented by NGOs in the St. Petersburg
WEPE0225

TXT 4 sexual health promotion: demonstrating efficacy and effectiveness in two trials

M.S.C. Lit1,2, J. Gold1,2,3, J. Hocking1, L. Keogh4, C.K. Fairley1,2,3, J. Thorpe4, M. Stobbe4, T. Spelman1, J. M. Holland1,2,3,4

1Burnet Institute, Centre for Population Health, Melbourne, Australia, 2University College London, Institute of Child Health, London, United Kingdom, 3Monash University, Epidemiology and Preventive Medicine, Melbourne, Australia, 4University of Melbourne, School of Population Health, Melbourne, Australia, 5Melbourne Sexual Health Clinic, Melbourne, Australia, 6Family Planning Victoria, Melbourne, Australia

Background: New and innovative methods are required to communicate sexual health messages to youth to counter rising rates of HIV/STIs and take advantage of growing diversification of media. Mobile phone text messages (SMS) are a popular mode of health promotion; they are portable, fast, reliable, and cost-effective. Trial One was a randomised controlled trial to determine the efficacy of SMS in promoting sexual health. In Trial Two, a large group of young people were randomised to determine the population effectiveness of the intervention.

Methods: In both studies young people aged 16-29 (completed a baseline questionnaire at a music festival in Australia, and follow-up questionnaire to identify changes in outcomes measures. Trial One participants were randomised to either an intervention arm (receiving monthly SMS and email messages) or a no-intervention control group. All Trial Two participants received SMS and either SMS or email messages.

Results: In Trial One, participants in the intervention arm reported higher sexual health knowledge (OR 2.72, 95%CI 1.68, 4.41), and females were more likely to have had a STI test in the past six months (OR 2.51, 95%CI 1.11, 5.69). There was no impact on condom use. Opinions of the messages were favourable, and over 75% reported showing them to friends or partners.

In Trial Two, 1995 people received SMS: 351 (18.8%) withdrew from receiving the messages during the six months. Weighted analyses found a significant increase in sexual health knowledge (p < 0.01) and STI testing (p < 0.01) over time. Focus group participants reported the intervention did not prompt immediate behaviour change, but were an entertaining and useful reminder to the messages during the six months. Weighted analyses found a significant were favourable, and over 75% reported showing them to friends or partners.

Conclusions: This simple SMS intervention improved sexual health knowledge and STI testing rates. SMS is popular and convenient and is effective and effective for sexual health promotion.

Presenting author email: mlim@gum.ucl.ac.uk

WEPE0226

HIV prevention among young people in nursing and teaching colleges in Northern Uganda

R. Kanwagi1, D. Seri1, L. Cicci2, J. Olmi3
1NUMAT/World Vision, Gulu, Uganda, 2NUMAT/JSI, Gulu, Uganda

Issues: Young people in higher training institutions have been inadequately reached with HIV preventive interventions in northern Uganda, yet they know are known to be exposed to risky sexual behaviors like transactional sex and risk generational sex. There is hardly any institution-based program for young people to help them with necessary knowledge and skills to increase their risk perception. Evidence showed that in northern Uganda 9.6% of female aged 10-24 years had sex with a man 10 years older than them and 54% of all unmarried people in the same age group have already had their sexual debut.

Description: A rapid needs assessment was conducted in six nursing and teaching colleges to identify the HIV-related information that could target students. In close collaboration with institutions welfare departments, our Program designed peer-focused intervention to reach students with messages on sexual risk reduction and HIV counseling and testing (HCT) services. The intervention involved: holding advocacy meetings with institution heads, participatory selection and training of young people as peer educators, creation of peer education activities, dissemination of activities to disseminate HIV prevention messages and HCT outcomes within the institution.

Lessons learned: In total, 180 peer educators from six institutions were trained as peer educators and conducted 20 life planning skills sessions to integrate their education. In total, 234 students (134 F 100 M) have accessed HIV counseling and testing through school based camps and 11 (4.7%) were found to be HIV-positive.

Next steps: Effective HIV/AIDS interventions targeting the youth need an integrated and comprehensive approach, including youth friendly services. Preventive messages must be accompanied with HCT to increase one's risk perception. To ensure sustainability of such an approach, peer educators should be supported to establish institutional youth clubs as vehicles for HIV/AIDS activities.

Presenting author email: jotim@numatuganda.org

WEPE0227

Integration of HIV/AIDS prevention into youth-friendly reproductive health strategies in Georgia

T. Khomusadze, L. Bakradze

UNFPA, Georgia CO, Tbilisi, Georgia

Issues: Assisting Georgia in the implementation of the IPCD Programme of Action and achievement of MDGs, UNFPA programme supports innovative strategies, improving the access of population and particularly, youth to qual- ity SRH information and services.

Description: UNFPA supported strategy for integration of HIV/AIDS in SRH programmes is efficient due to the multisectoral approach, addressing several interrelated priority areas:

- Youth education and behavior change communication,
- Creation of youth friendly RH services (YRHS),
- Training of service providers
- Condom social marketing for youth.

HIV/AIDS is fully integrated in training materials, commodity and equipment supply plans and newly established YRHSs. Integrated programmes became more cost-effective and improved use of programme coverage and overarched planned results: The Peer Education programme was intro- duced at Youth Summer Camps and reached more than 33,000 young people during three years; 1083 service providers have been trained and provided integrated HIV/AIDS/FF/STIs services at the youth friendly SRH information centers. Condom social marketing developed the brand of condoms, popular and affordable for youth: in 2009 the annual condom sales reached 1,300,000.

Lessons learned: Multisectoral approach is the most effective strategy for fast and smooth integration of HIV/AIDS services, particularly, for low and middle income countries, reforming health care systems.

Integrated services are more affordable for youth and cost-effective for health care facilities.

The integration of HIV/AIDS and RH services proved to be efficient strategy for HIV/AIDS prevention, particularly, due to cost-effective utilization of financial and human resources, for expanding the coverage of target population and improving the coordination among key players in the field of HIV/AIDS prevention and RH.

Next steps: For sustainability of results, development of new partnerships with private sector and insurance companies is an important step forward.

WEPE0228

The HIV prevention education in schools

R. Matos; J. Rodriguez

Organizacion StopVHI, Pampatar, Venezuela

Issues: HIV prevention education in schools is aimed at children and young people of school-going age attending public and private sector schools in Nueva Esparta State, Venezuela. The purpose of HIV prevention education is to delay the debut of sexual activity and reduce their risk of acquiring HIV infection due to lack of information and use of prevention methods in this age group.

Description: The activities were carried out from January 21st to October 30th 2009 at 14 schools belonging to 8 municipalities at the Nueva Esparta State (Venezuela), with a participation of 4500 students from 4th, 5th and 6th grade of elementary school, whose ages were between 9 and 13 years old. At the end of each discussion, there was a general review and a cycle of questions started to guarantee that the content has been understood and as- similated by the participants.

Lessons learned: This was the first phase of a long term process to lay the organization to its later monitoring and evaluation, allowing consequently, the definition of specific actions in relation to the achieved results.

The following results have been found:

- The school population in private schools has an idea of the topic, they are interested and participate in an active way.
- Students in public schools have little knowledge about the topic and they do not participate too much.
- There was no recorded background information of similar experiences in the visited schools.

Next steps:
- Promotion of leadership in schools to prevent HIV.
- Inclusion of this discussion into the agenda of academic school Schedule through integral educational community programs.
- Expansion of the prevention discussions on HIV aimed at (11) the municipalities at the Nueva Esparta State.

Expansion of the prevention discussions on HIV to the level of middle/high school.

WEPE0229

Dominican “street” youth as stakeholders of HIV and violence prevention in marginalized communities

J.A. Jimenez, L. Arturo Castro1, S. Caro1, A.M. Navarro3, T. De Hoyos1
1Fundacion Red de Jovenes Unidos de Guachupiles-FURJUG, Gerencia, Distrito Nacional, Dominican Republic, 2Red de Jovenes de Guachupiles, Santo Domingo, Dominican Republic, 3Onusida, Santo Domingo, Dominican Republic, 4Cepresa, Santo Domingo, Dominican Republic

Issues: HIV prevention with male and female adolescent and young popula- tions in the Dominican Republic (DR) has been traditionally focused on formal education. No efforts have been made to reach young “street” groups that frequently abandon school at an early age, including members of youth gangs in marginalized neighborhoods.

Description: In 2004 the Presidential Council on AIDS (COPRESIDA) sup-...
Programs, Onitsha, Nigeria, 2Youth Network on HIV/AIDS, Population and Pacity of young people, provided them with resource materials, condoms and radio sports programs including 4 National Dailies in Nigeria. It built the capacity of young people. This program was reported at young people favorite TV and radio stations - including the promotion of health-oriented behaviors and the prevention of unsafe sex. It targeted young people within school and non-school environments. It is currently a legally recognized civil society stakeholder at community, national and international levels. The achievement of previously stigmatized "street" youth as key agents for constructive social change in their communities has had a highly positive impact not only on HIV prevention but also on substantial reduction of youth violence in Guahaputa and neighboring communities.

Next steps: FURUG needs further institutional strengthening in order to be able to reach new young and also to extend its reach of the interventions - including the promotion of health-oriented behaviors and the prevention of unsafe sex - to new generations of Guahaputa adolescents.

Presenting author email: l.a.jimenez15@gmail.com

WEPE0230 Prevention for youth in universities and schools. Ukrainian experience

N. Karolova1, Public Information-Instructional Center Za Ravnie Prava, Whole Organization, Chairperson of Board, Kherson, Ukraine

Issues: National program on HIV/STI prevention in Ukraine defines vulnerable groups as injection drug users, sex workers and men who have sex with men. Young people that doesn’t fall under the definition of the vulnerable group, is not considered as a priority for HIV/STI prevention in Ukraine, though risks of infection remain high. According to the official data of AIDS Center heterosexual way of transmission reaches 40%.

Description: Not many NGOs provide services on HIV prevention among young people. In most cases schools have only one lesson on HIV which is dedicated to the 1st December. The lesson is conducted as a dictation or monotonous lecture which is not effective at all. Starting with 2009 Za Ravnie Prava started work with universities and schools. Thus there were practical seminars on HIV and AIDS presented in 4 universities. Participants are students aged from 15 to 21. The seminar includes information on HIV spread in Ukraine and world, theoretical part on HIV and STI, ways of transmission, risks and prevention measures, life with HIV and treatment. Distinctive feature of the seminar is interactivity and practical orientation. The practical part of the seminar includes games on correct choosing of a condom, correct putting of a condom on a dildo, dynamics of the spread of HIV infection and so on. The seminar is followed by small videos aimed at HIV prevention and motivation to testing.

The important aspect of the seminar lies in the consideration of psychological and age features of the youth. It’s more effective to conduct the seminar based on peer-to-peer methodology.


Presenting author email: director_zr@hotmail.com

WEPE0231 Sports as a means of integrating reproductive health and education among young people in Nigeria: YIRHEA way

I.P. Oguudimma1, C.O. Okonkwo1
Youth Integration on Rights Health and Eradication of HIV/AIDS (YIRHEA), Programs, Onitsha, Nigeria. Youth Network on HIV/AIDS, Population and Development in Nigeria (NYNETHA), Management, Awka, Nigeria

Background: Clear understanding of the situation of young people and their need is required to design and successfully implement interventions to stem tide of vulnerability among them. Young people have different needs and problems from adults; thus they have to be treated and their needs addressed differently. However, sports especially football, passion of many young people in Nigeria is the most effective way to do so. This project uses Youth Integration on Rights, Health and Eradication of HIV/AIDS (YIRHEA) Street Football (YSF) a reproductive health package to create a fun open environment where young people can comfortably explore sensitive issues.

Methodology: In most secondary schools in Nigeria boys over 15-19 years of age are bread in and out of schools with young people were selected and registered. Participants were enrolled in a compulsory 2-day workshop tagged YIRHEA Street football (YSF) Institute. YSF Institute has provided participants with basic reproductive health education including life skills, access to condoms and information on its use. Prizes were awarded to the winners and outstanding young people.

Results: YSF Institute was compulsory for competing in the soccer competition, so during the workshop that benefited 150 young people. This program was reported at young people favorite TV and radio sports programs including 4 National Dailies in Nigeria. It built the capacity of young people, provided them with resource materials, condoms and discovered new talents.

Conclusions: There is need for donor agencies and programmers to explore this avenue so that they can reach more young people as it is cost effective.

Presenting author email: obinnacl9@yahoo.com

WEPE0232 National exhibition of the health and prevention in Brazilian schools project

N. Vieira1, J. Silva2, M. Braga3, M.R. Gomes4, M.D.F. Malheiro3, I. Botão4, J. Kraizcy2
1Ministry of Health, STD/AIDS and Viral Hepatitis Department, Brasilia, Brazil, 2UNESCO Brazil, Educação, Brasilia, Brazil, 3Ministry of Education, Brasilia, Brazil, 4Ministry of Health, STD/AIDS and Hepatitis Department, Brasilia, Brazil

Issues: The Exhibition is a strategy designed to boost the implementation of the National Health and Prevention in School Projects (HPS) throughout Brazil, a space for sharing experiences and qualifying people professionally involved in education, health or with young people. HPS is a joint initiative of the Ministries of Health and Education in partnership with UNESCO, UNICEF and UNFPA and its main objective is to unfold actions articulated among the health services and schools designed to promote health, sexual and reproductive rights, and prevention against STD/HIV/AIDS among adolescents and young people.

Description: Three Exhibitions have been held so far involving three thousand participants including managers and professionals from the fields of health and education, and representatives of universities, civil society and young people’s organisations. Activities include thematic workshops, round tables, conferences and reporting on experiences in implementing the Project in the various Brazilian states; an opportunity for learning, dialoguing and exchanging experiences.

Lessons learned: The exhibition has been consolidating itself as a strategy for reflecting on the themes of the HPS project and strengthening the messages. It aggregates new actors and partners, mobilizes teachers from all over the country, promotes exchanges of experiences, and presents the actions being unfolded in the schools and services thereby enhancing their visibility. The exhibition is a vital initiative for the implementation of public policies on sexuality education.

Next steps: To continue the process the 4th National HPS Exhibition will take place in 2010 and it is hoped to increase the number of participants, launch educational material prepared for the project, hold workshops and run courses to qualify health and education professionals and those working with young people and to intensify the presentation of accounts of experiences in the interior of the country.

Presenting author email: nara.vieira@aids.gov.br

WEPE0233 The education sector in Vietnam responds to HIV/AIDS; programming school-based HIV education in secondary school students

B. Pham Thi Thu
Ministry of Education and Training, Student Affairs Department, Hanoi, Viet Nam

Issues: Vietnam’s education system offers unparalleled opportunity to reach most young people; 87% of young people attend primary school and the majority complete part of secondary school. Although school-based HIV/ AIDS education has been offered through discrete initiatives in select geographic areas, the education sector has faced numerous challenges to insti-
tute a national program.

Description: In 2007 the Ministry of Education and Training launched a comprehensive response to HIV & AIDS with an Action Programme on Reproductive Health and HIV/AIDS for secondary school students 2007 - 2010. The Action Programme aims to raise awareness and reduce risky practices among secondary school students from grades 6 to 12. Sexuality education and life skills education are priorities of the curriculum content and approach. The Ministry of Education and Training has taken the lead with donors and partners to initiate a curriculum comprised of in-class lessons and extra-curricular sessions. Two guidelines required to implement the curriculum have been developed: 1) Teaching HIV and AIDS in Biology, Literature and Civic Education subjects in Grades 8 and 10; 2) Implementing Extra-curricular activities on RH and HIV/AIDS for upper and lower secondary schools. The Guidelines are being implemented in 36 schools in 5 provinces in 2010 for evaluation before national adoption.

Next steps: MOET and partners continue to apply the guidelines to all sec-

Author Index

Poster Exhibition

Late Breaker Posters

Wednesday 21 July

Thursday 22 July

Friday 23 July

Abstract Book Volume 2 | www.aids2010.org
WEPE0234
Integration of handicapped young people in AIDS prevention workshops
L. Espinosa Gómez
CODISSE, A. C., Youth Program, Guadalajara, Mexico

Issues: Around 41,000 handicapped (either visual, hearing or motor) students are enrolled in Mexican Universities; they are part of the Mexican youth which represents 50% of the new AIDS diagnostics. Nevertheless, there is not yet a single educational tool designed for their integration into the prophylactic workshops.

Description: A research was conducted, sampling hearing, visually and motor impaired students from Jalisco state Universities. Their learning habits and behavior were analyzed aiming to develop a solution for their communication barriers, and to avoid them from being targeted in AIDS prevention. Communication technologies and social networks were combined trying to fully integrate hearing impaired students to the prevention schemes intended for non-handicapped youth. The participatory ethnographic evaluation and research approach: a tool for enhancing behaviour change among female out-of-school youth in a slum in Nigeria

J. Mohammed-Jantaba, J. Anyanti, S. Adebayo, G. Jiya, J. Ocholi
Society for Family Health, Abuja, Nigeria

Background: Targeting female out-of-school youth (FOSY) is imperative in HIV prevention. This study describes the implementation and evaluation of an intervention aimed at generating an in-depth understanding of the determinants of condom use, of the risk and protective factors, and of the constraints and opportunities surrounding the participation of young women in the intervention process.

Methods: Working with local community leaders and youth groups in Mpape, a slum near Abuja, 36 females were recruited. A six-step evidence-based process - from narrative data collection through analysis and intervention design and implementation - was developed. Peer educators were selected in a participatory way, recruited and trained. They communicated HIV prevention through ‘gisting’ - a local slang for informal newsy conversation among peers as well as through peer sessions. Community-wide activities for parents and guardians were undertaken. A quantitative ex-post facto design study was conducted to evaluate the programme, interviewing 800 respondents (400 exposed, 400 non-exposed).

Results: The study showed positive impact among FOSY who were exposed to the intervention compared with those who were not. They were more informed about sexual behaviour, were more likely to know at least 3 symptoms of STIs in women (p<0.0001), and that STIs can stop a man from fathering a child in the future, (p=0.005). Majority of female youth exposed preferred to the intervention compared with those who were not. They were more in-depth, were delinquent/late in loan repayment, health activists, and women’s research team conducted 16 focus group discussions with women from the Regions of Namibia.

Conclusions: Through this approach, appropriate intervention(s) could be designed to address key determinants of risk, and is particularly useful for female youth.

Presenting author email: jmuusa-brahim@sfh-nigeria.org

WEPE0235
Male Youth on the Block (MYOB) in Saint Vincent, Caribbean: risks to HIV and condom use dynamics
B. Nitto-Andrade1, J. Joseph9, K. Singhi8, P. Fauré4, A. Rampersad2
1Population Services International, Port of Spain, Trinidad and Tobago, 2Population Services International (Society for Family Health), Port of Spain, Trinidad and Tobago, 3Population Services International, Mexico, Mexico

Background: National HIV-prevalence in Saint Vincent is 0.4%, with no existing data for subpopulations. Literature suggests that young and poor men gathering on the streets (MYOB) are among the most at risk populations (UNAIDS, 2008).

Methods: In order to identify priority risk factors and determinants of condom use, as part of an intervention targeting MYOB, a qualitative exploratory study was conducted among 281 sexually active MYOB aged 16-26 in 2008. Study participants were identified using a time-location sampling. Participants were also instructed to demonstrate the correct way to put on a condom using a wooden dildo. Frequencies to determine the level of indicators and logistic

WEPE0236
Lessons learned: a tool which will generate changes towards AIDS prevention in hearing impaired young people
L. Espinosa Gómez
CODISSE, A. C., Youth Program, Guadalajara, Mexico

Abstract Book Volume 2 | www.aids2010.org

WEPE0237
Jobs two years later among marginalized, Ugandan young people following HIV prevention and vocational training
M. Rotheram1, R. Kasire2, M. Lightfoot3, K. Desmond4
1UCCLA Center for Community Health, Los Angeles, United States, 2UYDEL, Kampala, Uganda, 3UCSF Center for AIDS Prevention Studies, San Francisco, United States, 4UCLA, Los Angeles, United States

Background: Having a future is a significant motivator to reduce & eliminate risk for HIV, especially in low and middle income countries.

Methods: 100 at risk youth in Kampala, Uganda (1/3 HIV+; 1/3 homeless) were randomly assigned to: 1) immediately receive vocational training & condom use for 6 months & Street Smart (an HIV prevention program); or 2) receive vocational training & HIV training 1 year later. Follow-up assessments were conducted at 2 years following randomization.

Results: Youth received a kit to allow the youth to work after training: a sewing machine, tools for cell phone repair, hair plaiting materials, kitchen utensils for catering; welding was the only profession that did not receive a kit. Men who were exposed to the intervention succeeded in condom use occurred across both conditions over time; in general, there was one recent sexual partner. Alcohol & marijuana use were significant barriers at the baseline, but were not significantly lower immediately following the intervention.

Conclusions: Vocational training appears a viable strategy to offer youth a pathway out of poverty and sustained risk for HIV. PEPPER has extended this program & a follow-up RCT is currently under review.

Presenting author email: rotheram@ucla.edu

WEPE0238
“I know, but I can’t do it”: Namibian women face barriers on the road to empowerment and behavior change
K.E. Vassos1,2, I. Mendes3, A. Cooper2, J. Luchenta2, T. Ngodji3, W. Luyanga3
1Johns Hopkins University Bloomberg School of Public Health, Family and Reproductive Health, Baltimore, United States, 2Project HOPE, Millwood, VA, United States, 3Project HOPE, Windhoek, Namibia

Background: In Namibia, young women (15-24) are 3 times as likely to be HIV infected than their male counterparts. To promote positive behavior change and empower young women through increased financial independence, Project HOPE implemented a program for young women (15-24) combining microcredit and prevention messages in the Kavango and Caprivi regions of Namibia.

Methods: A qualitative evaluation was conducted in both regions. A local research team conducted 16 focus group discussions with women from the program and 100 in-depth interviews with those who repaid loans successfully, were delinquent/late in loan repayment, health activists, and women’s next of kin. Part of this evaluation focused on whether young women were able to act on the prevention messages they received.

Results: Women who participated in the program consistently recounted the prevention messages related to reducing sexual risk behaviors. Successful women reported economic independence, increased communication with partners related to safer sex and attempts to implement behavior change. However, women frequently described social barriers and service gaps that impeded their ability to put knowledge into practice. Social barriers included the health knowledge of male partners, sociocultural norms associated with male sexual power, and male and gender of condoms and multiple partnerships. Service gaps included a lack of access to VCT and family planning services, creating an inability to get tested and access condoms and information.

Conclusions: Microcredit coupled with prevention messages can be an effective means of empowering women. However, there are still barriers to converting knowledge into behavior change for young women. HIV prevention programming needs to engage men, as they often hold power in sexual decision-making. Interventions should target structural factors, increasing access to adolescent-friendly services including VCT and family planning, particularly in rural communities.

Presenting author email: kathyv17@gmail.com
WEPE0239
“Not so secret lives” – an online initiative to through new media
B.L. Yeap1, S. Lim2, I. Ong3, V. Prema4, K. Vijaya4
1Health Promotion Board, Youth Health Programme Development 4, Singapore, Singapore, 2Health Promotion Board, New Media Unit, Singapore, 3Singapore, 4Health Promotion Board, Corporate Marketing Department, Singapore, Singapore

Description: Endemic of HIV/AIDS among youths, the Health Promotion Board, Singapore (HPB) conceptualised a new media initiative specifically targeted at our young people. From 60% of the initiative involves a web story in the form of blogs by 2 youths who share the daily happenings in their intertwined lives including their struggles with sexuality issues. Information on HIV/AIDS was woven into the storyline to highlight to youth that they may be more susceptible to infection than they think and to educate them about HIV/AIDS prevention.

Results: The initiative utilised social media such as Facebook, web banners and engagement of bloggers. Over two weeks, the website garnered over 191,000 page views of which 32,000 were unique visitors. The site also caught attention of a local celebrity who blogged about it and encouraged fans to visit it. Favourable comments from users were also posted on the website.

To further engage online visitors, a competition on how the blogs should end was also held. A total of 32 entries were received and the winning entry was posted online.

Conclusion: Considering that there was no above-the-line publicity, there was high traffic to the website. The direct traffic to the website (ie when users type in the link to the blog posts into the browser) also indicates strong word-of-mouth viral effect and influence of social networking sites amongst the youth target audience. A second season is currently being developed.

Presenting author email: janice_yeap@hpb.gov.sg

WEPE0240
Influences on rural Tanzanian young people’s sexual behaviours: a qualitative study
D.A. Ross1, G. Mishana2, J. Wamoyi3, A.M. Doyle4
1Department of Social Work, University of Nairobi, Kenya, 2Department of Health, London, United Kingdom, 3National Institute for Medical Research, Mwanza Research Centre, Mwanza, Tanzania, United Republic of Tanzania

Background: Designing behavioural interventions to reduce young people’s sexual risk should be guided by an understanding of the people and events that are most influential on their sexual lives.

Methods: In 2009, same-sex, in-depth interviews (1.5-2.5 hours) were conducted by two post-doctoral social scientists with 23 young adults aged 24-30 years (12 female, 11 males) from the MEMA kwa Vijana (MKV) Trial's intervention communities in rural Mwanza Region, Tanzania. All had had two similar in-depth interviews in 1999 and 2002; most by the same interviewers. The in-depth interviews included a questionnaire to explore the major influences and constraints that had affected their sexual behaviour and decisions. Thematic analysis was aided by NVivo7 software.

Results: Of the 23 participants (8/11 females, 9/12 males), and all were sexually active. Only three men and one woman had attended secondary school. Male respondents reported 2-7 and 1-11 lifetime sexual partners, respectively. The main people that the respondents’ spontaneously mentioned as having influenced their sexual lives were their parents, older siblings and friends. Visits away from home featured prominently in the establishment of new friends for many married and young women. It was men and male partners who made decisions on when and how often they had sex, and whether they used condoms. Other important influences included the economic circumstances and cultural values of their families such as the importance given to early marriage and procreation, whether they were from a single (maternal) parent family, and the degree and nature of parental control and monitoring. None spontaneously mentioned the MKV in-school sessions as something that had influenced their sex lives or sexual decisions.

Conclusions: The importance of parental influence, female autonomy and the importance given to early marriage and procreation must influence the design of adolescent sexual health interventions.

Presenting author email: david.ross@lshtm.ac.uk

WEPE0241
HIV prevention life skills in schools in Namibia
I. MacLeod, S. Mangan
UNICEF, Windhoek, Namibia

Description: Since its inception in 1998 the MMPC programme has reached approximately 241,000 young people. In comparing MMPC participants with non-participants, the Evaluation found that MMPC participants reported safer sexual practices and scored high on many of the HIV prevention related questions. The evaluation also found that whilst the programme content, methodology and tools were of high quality, there were significant shortcomings in the training, skills and competencies of the MMPC facilitators and in the programme monitoring. The evaluation highlighted the limitation of MMPC in reaching all students, due to its optional, extra-curricular nature and recommended a more formalisation with an emphasis on capacity building.

Lessons learned: MMPC is a quality HIV prevention life skills programme whose potential impact can be maximised by formalising as a mandatory component of the education system and curriculum.

Next steps: Revising the MMPC curriculum, exploring sustainable options for delivery of the programme through government structures and incorporating elements of MMPC into core curriculum. Strengthening of investment in training of facilitators and introducing programme monitoring benchmarks.

Presenting author email: imacleod@unicef.org

WEPE0242
Evaluation of the Bashment Bus adolescent-friendly mobile HIV prevention and testing service
N. Condell1, C. Pious1, V. Thompson1
1UNICEF, Children and HIV/AIDS Programme, Kingston, Jamaica, 2Children First, Spanish Town, Jamaica

Issues: An estimated 1.8% of Jamaicans are living with HIV, with adolescents at high risk of infection. According to a 2008 national survey, 76% of sexually active males and 21% of females 15-24 years of age report not using any condom at last sex. Twenty-three of males and 56% of females in this group did not use a condom at last sex. A further 37% traded sex for money or gifts with current or former partners. Without condom use at last sex. Since 2006, the media has frequently reported on adolescents involved in risky sex or bush sex.

Description: Launched in 2006, the “Bashment Bus” is a youth-friendly mobile HIV prevention service providing sexual and reproductive health services, including HIV testing, for young people between 10 –19 years. Making stops throughout hard-to-reach communities in three of the most affected parishes, peer educators use dance, drama and other forms of popular culture to convey prevention messages.

Lessons learned: A 2008 evaluation measured the impact of the service against the baseline data generated in 2006, finding that:

The proportion of adolescents who correctly identified two methods of HIV prevention increased by 15% in 2008;

the proportion of adolescents who rejected HIV transmission myths reduced from 49% in 2006 to 32% in 2008,

condom use with a non-regular partner increased, with 74% of girls and 68% of boys reporting condom use at last sex with a non-regular partner, compared with 54% and 77% respectively in 2006,

forced sex among adolescents in transactional sex relationships reduced from 60% in 2006 to 38% in 2008.

Next steps: The expansion of the service through partnerships with the Ministry of Health and increased targeted interventions among young men who have sex with men.

Presenting author email: ncondell@unicef.org

WEPE0243
Lessons in creating a cross-sectoral public-private partnership for HIV prevention among youth
B. Robinson1, J. Disterlath1, T. James-Trace1, R. Johnson2, J. Daly1
1US Department of State, Office of the US Global AIDS Coordinator, Washington, United States, 2APCDO Worldwide, Washington, United States, United States Mission Development Partners, Washington, United States

Issues: Youth aged 15-24 account for about 45% of new HIV infections globally, while youth, and girls and young women in particular, are at the center of the global HIV epidemic, they also represent the greatest hope for changing its course.

But youth are not one dimensional. HIV prevention programs must strategically target youth segments with appealing and ‘market-savvy’ messages and services as part of a multi-faceted, well-integrated, and mutually reinforcing set of interventions.

Description: The aim of the Partnership for an HIV-Free Generation (HPG) is to leverage core competencies of the private sector to enhance the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR) youth-focused HIV prevention programming in severely impacted countries.

HPG works to:

• Unify interventions for youth under a single strategy and shared brand
• Address girls’ unique vulnerability to HIV
• Build on proven approaches for changing behavior
• Directly engage youth and empower them with a positive vision for the future
• Recognize the diversity of youth and who and what affects their lives
• Provide access to economic opportunities
• Use real-time market research to inform interventions

HPG is being piloted in Kenya and in all key regions of sub-Saharan Africa. HPG has 10 strategic consortia, including 23 private sector organizations, and more than a dozen PEPFAR-supported implementing partners.

Lessons learned: HGP launched its Kenya Pilot in December 2008. More than 60,000 Kenyan youth from all socio-demographic groups attended the launch event and helped to unveil the G-PANGE youth lifestyle brand. HPG has 10 strategic consortia, including 23 private sector organizations, and more than a dozen PEPFAR-supported implementing partners.

Lessons learned:

1. Build on proven approaches for changing behavior
2. Address girls’ unique vulnerability to HIV
3. Directly engage youth and empower them with a positive vision for the future
4. Recognize the diversity of youth and who and what affects their lives
5. Provide access to economic opportunities
6. Use real-time market research to inform interventions

HPG is being piloted in Kenya and in all key regions of sub-Saharan Africa. HPG has 10 strategic consortia, including 23 private sector organizations, and more than a dozen PEPFAR-supported implementing partners.

Lessons learned: HGP launched its Kenya Pilot in December 2008. More than 60,000 Kenyan youth from all socio-demographic groups attended the launch event and helped to unveil the G-PANGE youth lifestyle brand. HPG has 10 strategic consortia, including 23 private sector organizations, and more than a dozen PEPFAR-supported implementing partners.

Lessons learned: HGP launched its Kenya Pilot in December 2008. More than 60,000 Kenyan youth from all socio-demographic groups attended the launch event and helped to unveil the G-PANGE youth lifestyle brand. HPG has 10 strategic consortia, including 23 private sector organizations, and more than a dozen PEPFAR-supported implementing partners.
WEPE0244
Navigating youth voice and program fidelity: lessons from the girl smart process evaluation

D. Polisichio1, E. Armstrong2
1Alternatives for Girls, Outreach & Education Services, Detroit, United States, 2University of Michigan, Joint Doctoral Program in Social Work and Sociology, Ann Arbor, United States

Issues: Sexual health programs are increasingly encouraged to utilize evidence-based interventions (EBI) and incorporate mechanisms for peer inclusion. Peers, however, are not always professional facilitators, which may compromise adherence to the EBI. This presentation describes the methods the Girl Smart Program developed to create an innovative tool that highlighted peer participation in the peer-led program and the EBI goals.

Description: Girl Smart is a six-session series adapted from the Street Smart EBI intended to decrease high-risk behaviors, increase HIV/STI-prevention knowledge and skills, and increase positive coping skills among adolescent women of color in metropolitan Detroit. Over two and a half years, Girl Smart was facilitated by 21 trained Peer Educators (PEs) who are also identified as at-risk. PEs were actively involved in monitoring program fidelity. Following each workshop, PEs completed Self Evaluations that followed the outline for each session and solicited information regarding changes made to each activity, the rationale for such changes, and facilitators’ overall experience with the session, and satisfaction with overall experience. PEs were asked to provide feedback on their own and each others’ skills as facilitators as well as identify issues and action steps for facilitation improvement following each session that was particularly successful or problematic. This feedback was used to create programmatic revisions and provide greater improvement opportunities for PEs.

Results: Over the course of two years, these questionnaires were collected for 63 of 66 workshops (95.5%).

Lessons learned: Analysis of PE Self Evaluations revealed trends towards improved facilitation and greater curricular fidelity. Youth became increasingly adept at responding to challenges presented by cohort participants and implementing diversity by modifying activity pacing and instruction without significant alterations to program content. Data from the Self Evaluations informed mid-program revisions, provided context for outcome data, and facilitated PE skill-building.

Next steps: This type of evaluation will be implemented with other youth-led programs at the parent agency. Presenting author email: dpolisichio@alternativesforgirls.org

WEPE0245
My body, my choice: an evaluation of performance-arts based HIV-prevention events for young people in London, United Kingdom

J. Griffiths1, T. Campbell1, M. Bath2, R. Bradbeer1, J. Cotrell1, V. Onobrakpeya3
1Newham Psychological Services, NHS Newham, London, United Kingdom, 2London Borough of Newham, Children & Young People’s Services, London, United Kingdom, 3University of New Vic Sixth Form College, London, United Kingdom, 4SHINE Team, NHS Newham, London, United Kingdom

Background: The London borough of Newham has higher than UK national rates of unplanned pregnancies, sexually transmitted infections (STIs) and HIV in teenagers. Local World AIDS Day community education and prevention activities, using a performance arts based approach underpinned by the Information-Motivation-Behavioural Skills Model of HIV prevention (Fisher & Fisher, 1998). A previous evaluation suggested intervention activities were more effective in changing HIV knowledge, confidence and intention to use condoms than a comparison group.

Methods: Young people participated in a school-based six week STI/HIV education programme culminating in a theatre production. Participants completed pre and post intervention questionnaires covering HIV-related knowledge, self-ratings of behavioural skills and motivation around condom use.

Results: Baseline data were collected for 101 participants: 48.5% male, 51.5% female; age range 15-20 years; mean = 17; largest ethnic group was Black (35.4%), followed by White (10.8%) and Asian (9.9%); 41.6% were sexually active. Post-intervention data has been collected for 44 participants to date: Gender, age and Black ethnic group figures are comparable with pre-intervention group, with smaller White (13.6%) and higher Asian (20.5%) ethnic groups and lower sexually active figure (36.4%). Initial between-group analyses indicated statistically significant higher levels of knowledge and self-rating of behavioural skills and motivation levels following intervention. Knowledge levels statistically significantly correlate with self-ratings of motivation and skills, and sexually active participants had statistically significantly higher scores on self-ratings of motivation and skill. Further analyses will be conducted once full post-intervention data is collected, including a paired sample analysis.

Conclusions: This study sought to build on previous evaluations by collecting pre and post intervention data. Initial results suggest that participating in performance-arts based HIV-prevention activities has a positive impact on HIV-related knowledge, behavioural skills and motivation to use condoms. Final results will be presented with implications for public health promotion approaches discussed.

Presenting author email: jayne.griffiths@newhamptonhs.uk

WEPE0246
National youth service corps: a vehicle for scaling up HIV prevention response with young people in Nigeria

V. Isiarnman1, J. Kayita2, T. Oyewale3, J. Abuhare4, A. Ipeaze4
1UNICEF Nigeria, Children and AIDS Section, Abuja, Nigeria, 2UNICEF, Education and Adolescent Development Cluster, Jayapura, Indonesia, 3National Youth Service Corps, Corp Welfare, Abuja, Nigeria, 4National Agency for the Control of AIDS (NACA), Program Coordination and Abuja, Nigeria

Issues: Young people are at the centre of the HIV epidemic. A population of 140 million and prevalence of 4.4% makes Nigeria the country with the second highest burden of HIV globally. Effective interventions could change the face of HIV in Nigeria and globally. A critical consideration is what system is/should be in place to effectively program for 36 million young people in and out of schools.

Description: The National Youth Service Corps (NYSC) HIV/AIDS and Reproductive health care and support programme started in 2002. The overall goal of the project is to increase the access of young people to Reproductive health, HIV/AIDS prevention information and life skills. This is being achieved through training 11,100 fresh university graduates as Peer Educator Trainers (PETs) to provide comprehensive HIV prevention information, life skills and refer them to appropriate services. Over a year, each PET trains and mentors at least 40 Peer Educators (PES) in secondary schools, who in turn influence at least 20 peers in and out of schools. Participatory research with young people has provided evidence to inform expansion of the out of school component.

Lessons learned: By 2006, the project has reached 29.8 million young people; young people exposed to the project were three times more knowledgeable about HIV/AIDS issues; and the project is cost efficient - unit cost to reach an adolescent is US$ 0.19. Only about 10% of secondary schools are currently covered by the project. In 2007, 76% believed that the PET/PE model was particularly successful or problematic. This feedback was used to create programmatic revisions and provide greater improvement opportunities for PEs.

Next steps: This evidence and experience is shaping the National prevention agenda for young people, and positioning NYSC as a key player on this agenda. The NYSC HIV/AIDS and Reproductive health care and support programme is being developed further support the institutionalization of the response and advocate with policy makers for adequate budgetary allocation. Presenting author email: visiarnman@unicef.org

WEPE0247
The impact of location: regional effects on an HIV prevention education program for youth in India

R. Chhabra1, C. Springer1, S. Ghosh1, D. Mosca1, E. Kamara2
1Albert Einstein College of Medicine, Pediatrics, Bronx, United States, 2Adelphi University, Psychology, Garden City, United States, 3Himachal Pradesh University, Psychology, Shimla, India, 4Albert Einstein College of Medicine, Bronx, United States

Background: The School-based Teenage Education Program (STEP) was conducted in two major cities (Mumbai and Bangalore) with high HIV prevalence in India, focusing on HIV and alcohol abuse prevention for 9th graders. Undergraduate college students were trained to teach this manualized program to 9th grade school students. Participants included at-risk adolescent girls.

Methods: Utilizing pre and post intervention evaluation design and using modified CDC evaluation measures, the impact of the STEP program on knowledge and risk taking was examined using analysis of variance, assessing the influence of the group (experimental vs. comparison, region (Mumbai vs. Bangalore) and sex on knowledge and risk taking.

Results: The overall n=5930 (Mumbai, n= 4081; Bangalore n= 1849) was composed of 51 % boys and the average age was 13.9 years (SD=0.8). Results showed greater knowledge gains for youth in the experimental group (7.66 vs. 5.41, p< .001), in Mumbai (7.36 vs. 5.72, p< .001), for boys (6.78 vs. 5.30, p< .001), and over time (5.96 vs. 7.11, p< .001). There were significant second and third order interaction effects. Similarly, there was decreased risk taking by region (9.15 vs 9.28, p< .05), sex (9.37 vs 9.06, p< .001) and over time (9.45 vs 8.97, p< .001).

Conclusions: The design and ownership of a community focused and supported program affects the overall acceptance and outcome of the program. Mumbai and Bangalore are major urban cities in India and both adapted the STEP program to fit the needs of their youth. The program was the same for both cities but was translated into regional languages. Significant differences as outcome attributed to the importance of considering regional differences in program implementation. Presenting author email: rosy.chhabra@einstein.yu.edu

WEPE0248
Ecstasy and HIV: reaching out to youths on substance abuse in Malaysia via Youth Services

L. Chee Kiang
Penang Family Health Development Association, Youth Advisory Centre, Penang, Malaysia

Issues: There is an increasing prevalence in the production, trafficking and abuse of Amphetamine-type stimulants in Malaysia, with youths forming the highest prevalence of substance abuse (68.6%) in 2008. Studies have shown that the use of ecstasy among youth is related to heightened sexual touch, involvement in risk behaviour, increased sexual desires, and unsafe sex lifestyles, putting them at risk of HIV contraction. Fear of capital punishment, substance-use among youths in Malaysia may be apprehensive in admitting
WEPE0251
The POWERR (prevention outreach with women empowering risk reduction) project: drawing on the power, strength, and experience of HIV-positive women to promote health among vulnerable young girls of color in Oakland, CA
B. Hughes, R. Hanna-Ware, F. Greenly
World (Women Organized to Respond to Life-threatening Disease), Outreach & Prevention, Oakland, United States

Issues: HIV/AIDS incidence among women in Alameda County, CA has increased in recent years, 26% of new AIDS cases in 2004 were among women.

Several programs focus on peer-driven interventions for young women, and none rely upon the leadership of HIV-positive women.

Description: POWERR, an evidence-based HIV prevention intervention targeting American girls (14-19), seeks to increase participants' personal sense of empowerment, sexual health knowledge, and understanding of positive social networks, and reduce sexual risk taking. POWERR includes youth-relevant curricula and a unique intervention team consisting of two female facilitators: one youth Peer Health Educator (PHE) and one HIV-positive Adult Ally. The role of the Adult Ally is to co-facilitate the intervention, provide a real "face" of HIV, and model positive female relationships. The Adult Ally reveals her status to participants during session three once relationships and trust have been established.

Lessons learned: The contribution of HIV-positive women to the intervention provides beneficial outcomes for positive women, youth PMEs, and participants. Pre-tests, 69% of participants reported they did not know anyone with HIV. Outcome data (interviews, focus groups, and process data) illustrate how the role of the Adult Ally broke girls' stereotypes about people with HIV/AIDS, concurrently building knowledge that "HIV has no face." Qualitative data reveals that the Adult Ally disclosure opens a trusting environment for groups, breaks stereotypes about HIV/AIDS, and provides a unique context for sharing needed health information. Participants report that the safe environment in the groups allows them to talk about things they would never otherwise talk about, including HIV/AIDS.

Next steps: HIV-positive women have a vast amount of expertise and knowledge. Exploration of effective strategies and interventions that promote leadership development and capacity building for HIV-positive women to work in partnership with youth must be conducted and promoted.

Presenting author email: bhughes@womenhiv.org

WEPE0252
Psychosocial and behavioral profile of adolescents in Benin regarding to sexuality and prevention of STIs and HIV and factors associated with condom use
S. Houndenou
Chaire de Recherche du Canada en Education à la Santé, Montréal, Canada

Background: This study attempts to: 1) identify the behavioral and psychosocial profile of adolescents in Benin with regard to sexuality and prevention of STI and HIV 2) to identify factors associated with condom use.

Method: Between June 2nd and June 20th 2008, 347 questionnaires with closed questions were collected from students aged 14 years to 18 years of high school, through a network of contacts on the ground in four cities of Benin.

Results: Adolescents in Benin have their first intercourse at an early age (mean age at first intercourse: 14.47 years) and more than half (54.1%) did not use condoms their first time. In addition, more than half of students aged 14 to 18 years old have already had a sexual experience with at least two different sexual partners. The multivariate regression analysis showed that consistent use of condoms and condom use the last time they had sexual intercourse are strongly associated with multivatations factors and condom use at first intercourse.

Conclusions: This result highlights the importance of starting sex education with young adolescents in Benin before they become sexually active. This exploratory study has further identified the needs of adolescents in Benin concerning sex education and prevention of STI and HIV. It will engage players in school and community in an educational process for students in Benin to make reasoned and informed choices regarding sexual health.

Presenting author email: spreo.houndenou@umontreal.ca

WEPE0253
Progress on the national commitments derived from the Ministerial Declaration "Preventing through Education": follow-up actions in Mexico, August 2008- December 2009
I.A. Izazola-Licea1, C. García de Leon2, H. Sucieta-Pérez3, H. Pérez-Vazquez4
1National Center for AIDS Prevention and Control (CENSIDA), Director of Prevention and Social Participation, Mexico City, Mexico, 2National Center for AIDS Prevention and Control (CENSIDA), Director of Prevention and Social Participation, Mexico City, Mexico, 3National Center for AIDS Prevention and Control (CENSIDA), Directorate of Prevention and Social Participation, Mexico City, Mexico

Issues: On August 1st, 2008, Ministries of Health and Ministries of Education of 31 Latin American and the Caribbean countries approved the Ministerial Declaration “Preventing through Education”.

Description: The Ministry of Health of Mexico established a management group, to activities related to the Declaration. A Workgroup on Comprehensive Sex Education was established in the Prevention Committee of the Na...
Provision addressing gender inequalities
WEPE0254—WEPE0268

WEPE0254
Factors influencing condom use among individuals in married and cohabiting relationships: a multilevel analysis of 14 developing countries
J. Kuo, K. Georgiades, H. Shannon, M. Boyle
McMaster University, Hamilton, Canada

Background: Little is known about preventive practices used by married women and heightened risk of HIV infection from husbands with extra-marital partners. Condom use is the main preventive method for HIV infection. The objectives of this study are to: (1) describe the prevalence of condom use among married/cohabiting men and women at risk for HIV transmission and (2) to model condom use as a function of HIV-related risk factors, including the inability of a woman to request her husband/partner to use a condom, preventive knowledge, HIV status, polygynous unions and extra-marital partners.

Methods: The data come from nationally representative cross-sectional Demographic and Health Surveys conducted between 2005 and 2007 of women (n=39,059) and their husbands/cohabiting partners (n=37,732) in 14 developing countries. This study uses multilevel, binomial logistic regression with i, individuals, nested in j, clusters, nested in k, countries.

Results: The prevalence of condom use was 12.0% (95%CI=10.5-13.5%) when either or both partners tested positive for HIV infection, 4.0% (95% CI=3.4-4.6%) when extra-marital sexual partners were identified in monogamous unions versus 0.4% (95%CI=0.0-1.04) in polygynous unions with extra-marital sexual partner(s). The following factors were associated with condom use after controlling for socio-demographic variables: inability of a woman to request her husband/partner to use a condom (OR=0.89, 95% CI=0.80-0.98); a woman’s knowledge of condom use as a preventive method of HIV infection (OR=1.37, 95% CI=1.13-1.66; OR=1.34-1.28); husband/cohabiting partner is HIV-positive (OR=2.09, 95% CI=1.64-2.65); women has extra-marital partner(s) (OR=1.74, 95% CI=1.05-2.87). Women's knowledge and husband/partner’s having extra-marital partner(s) were not associated with condom use.

Conclusions: Women versus men in married or cohabiting relationships are at excessive risk for HIV infection. Policies and programs are needed urgently in developing countries to promote condom use and/or reduce the prevalence of males establishing extra-marital partners with the objective of reducing asymmetric risk of HIV infection among women.

Presenting author email: bmwheyk@gmail.com

Lessons learned: HIV prevalence among female clients appears to be higher than male clients, (2.2% vs 1.7%) even though the majority of the VCT attendees were men (76.7%).

Health seeking behaviors were influenced by sex; around 18.4% of females visited the VCT due to the death of sexual and reproductive health to monitor access to goods and services and adolescents and youth. In addition, 13,456 training sessions were offered to health workers and teachers in service for those in pre-service stages. The Ministry of Health developed, in collaboration with regional experts, a Glossary of preventive knowledge and HIV terminology in Spanish, MoH and MoE developed a Guide Book for teachers of the School and Health Program, including comprehensive sex health issues. Sexual and Reproductive Friendly Health Services were evaluated and 174 were unsubscribed (bad quality standards). Seven Ambulatory Health Services for HIV were created.

Lessons learned: International frameworks based on scientific evidence, contribute to strength and develop joint health and education policies and strategies focused on HIV prevention. Since the Declaration was approved, relations and planning processes between MoH and MoE have been improved in order to strength joint strategies for other health issues like H1N1 epidemic, obesity.

Next steps: a) health and education programs must be evaluated and updated, b) a national M&E system for this initiative, c) definition of Friendly services, d) diffusion at local levels and legislators.

Presenting author email: jose.izazola@salud.gob.mx

WEPE0255
Gender influence on VCT seeking in Egypt
T. Bahay, S. Elkanamwy, I. Abdel Rahman, M. Moustafa, S. Shawkya, I. Kabore, C. Soliman, Ministry of Health, National AIDS Program, Cairo, Egypt; Family Health International, Cairo, Egypt; 1United Nations Population Fund, Cairo, Egypt; 2The American University in Cairo, Cairo, Egypt, 3Family Health International, Washington, DC, United States

Issues: The Egyptian Ministry of Health has placed strong emphasis on the prevention of HIV/AIDS. The National AIDS Program established numerous sites for counseling and testing (HIV). However, the proportion of women accessing VCT services at the national level remains low compared to men.

Description: In Egypt, 28 national mobile and fixed VCT sites provide a standardized approach of anonymous, confidential and free services. This paper will focus on data from 7,712 clients who visited 13 VCT sites between 2004 and 2008

Lessons learned: HIV prevalence among female clients appears to be higher than male clients, (2.2% vs 1.7%) even though the majority of the VCT attendees were men (76.7%).

Health seeking behaviors were influenced by sex; around 18.4% of females visited the VCT due to the death of sexual and reproductive health to monitor access to goods and services and adolescents and youth. In addition, 13,456 training sessions were offered to health workers and teachers in service for those in pre-service stages. The Ministry of Health developed, in collaboration with regional experts, a Glossary of preventive knowledge and HIV terminology in Spanish, MoH and MoE developed a Guide Book for teachers of the School and Health Program, including comprehensive sex health issues. Sexual and Reproductive Friendly Health Services were evaluated and 174 were unsubscribed (bad quality standards). Seven Ambulatory Health Services for HIV were created.

Lessons learned: International frameworks based on scientific evidence, contribute to strength and develop joint health and education policies and strategies focused on HIV prevention. Since the Declaration was approved, relations and planning processes between MoH and MoE have been improved in order to strength joint strategies for other health issues like H1N1 epidemic, obesity.

Next steps: a) health and education programs must be evaluated and updated, b) a national M&E system for this initiative, c) definition of Friendly services, d) diffusion at local levels and legislators.

Presenting author email: tabaaah@hotmail.com

WEPE0256
Mainstreaming gender into grassroots HIV/AIDS prevention and control programme: case study of the chevron independent women and girls project community health programme, Lagos, Nigeria
J. Uengebu, B. Ebo-Neji
Women’s Rights and Health Project, Management, Ejigbo, Nigeria; University of Lagos, Business Management, Lagos, Babcock University Akinkola College of Technology (LAOTECH), Sociology, Ijebu, Nigeria

Issues: According to the 2008 WHO and UNAIDS global estimates, women comprise 50% of people living with HIV, while in sub-Saharan Africa women constitute 60% of people living with HIV. Gender inequalities are a key driver of the epidemic in several ways: culture and religion encourage men to have more sexual partners and older men to have sexual relations with much younger women, while preventing women and young girls from accessing HIV information and services. The inability of national programmes to address underlying gender inequalities also contributes to the increasing burden of HIV on women. It is therefore pertinent that programmes addressing the gender dynamics of the HIV epidemic be showcased.

Description: Women’s Rights and Health Project (WRHP) in partnership with Chevron Nigeria Limited (CINL) implemented a 9-month community health intervention on HIV/AIDS and Malaria Prevention and control. The programme was a multi-sectoral community-based approach involving community leaders, government officials and a private sector organization and application of a participatory methodology in training and step-down sessions.

Lessons learned: The programme successfully reached 1,800 members of 4 grassroots communities (60% of whom were women and girls) with HIV/AIDS prevention and control messages, provided free HIV screening to 98 community members (recording a 20% increase in the number of women accessing testing services), established partnerships with 15 grassroots vocational, trade and religious organizations.

Next steps: Addressing the gender dimension of the HIV/AIDS epidemic involves challenging the very structures that sustain and promote the inequality between men and women namely culture and tradition. Grassroots HIV/AIDS prevention programmes must address the issues of access to HIV testing for women as a human rights issue and build it into the design as their programmes from inception.

Presenting author email: rinzi@yahoo.com

WEPE0257
Programs for women and girls depend on strengthening the enabling environment
K. Harder, J. Gay, M. Croce-Galis
Population Action International, Research, Arlington, United States; Consultant, Takoma Park, United States; 2Aetna Consulting, Hoboken, United States

Issues: With women making up 50% of those living with HIV, creating a supportive and enabling environment for women and girls is critical to ensure that interventions to prevent, treat or care for those with HIV will have their intended effect.

Description: GSI and FAI have compiled the evidence of HIV/AIDS interventions that work for women and girls, including 123 studies related to the enabling environment. Compelling evidence exists that environmental factors including women’s legal rights, employment opportunities, income, access to education, violence, traditional gender norms, and stigma and discrimination, determine whether any HIV intervention will truly help.

Lessons learned: Evidence from What Works: Evidence for HIV/AIDS Interventions for Women and Girls demonstrates that community-based approaches that include the media and religious leaders have been successful in creating an enabling environment for women. Community-based participatory learning and action approaches that promote more gender equitable relationships, thereby decreasing violence against women and HIV risk. Community-based approaches that are even stronger when backed up with legal/policy reform to enforce laws that allow widows to retain their property. Integration of HIV/AIDS information with community-based women’s empowerment and microfinance programs can lead to a reduction in gender-based violence and increases in protective behavior. Community-based interventions that provide accurate

Abstract Book Volume 2 | www.aids2010.org
WEPE0258

What’s love got to do with it? Adapting HIV evidence-based interventions with couples in South Africa


1Dalhousie University, School of Health and Human Performance, Halifax, Canada, 2University of Florida, College of Public Health, Gainesville, Florida, 3RTI International, Substance Abuse Treatment Evaluations & Interventions, Durham, United States, 4Columbia University, School of Social Work, New York, United States, 5Medical Research Council, Cape Town, South Africa, 6Johns Hopkins University, Baltimore, United States

Issues: South Africa has a great number of people living with HIV with tremendous poverty and unemployment interacting with alcohol abuse and gender-based violence. Even with these negative aspects, most couples in poor communities stay together for long periods. Best-evidence interventions (EBIs) focusing on the intersection of substance abuse, sexual risk and gender-based violence have been operating in South Africa. Nevertheless, working comprehensively with women and men who are a couple to address these risks is challenging. This study identified multiple partners, substance abuse and unprotected sex, lack of communication and gender-based violence needs of the focus of HIV prevention for women in Canada has failed to provide a critical perspective on the diversity of women’s experiences in relation to HIV prevention. Furthermore, not addressing the intersection of substance abuse and sexual violence means that condoms prevent HIV infection appear to be the best predictors for risky sexual behavior among men. The latter is also important in condom use among single females. Both factors, however, do not explain sexual behavior of married women, suggesting a lack of barriers for prevention decisions among married females or a general tendency of not using condoms among young women.

Lessons learned: Men, women, and couples were eager to come to the workshops and work on positive behaviors. Several have since been trained to become peer leaders. Traditional values and norms made great for discussion points (e.g., many partners and lack of condom use) and how new beliefs (“condomize”) will help make positive protective factors for couples (e.g., monopoly) while keeping healthy cultural practices (e.g., strength of family). Next steps: To develop and implement intervention materials on portable laptops and interactive peers as role models in local community centers conducting the workshops. Sponsored by NIAAA.

Presenting author email: wmw@rti.org

WEPE0259

A meta-ethnographic analysis of women and HIV prevention in Canada: exploring key issues and implications for women’s health

J. Gahagan1, D. Leduci1, R. Jackson1, T. Prentice1, M. Amirtha1

1Dalhousie University, School of Health and Human Performance, Halifax, Canada

Background: Despite increasing rates of HIV infections among women in Canada and a long history of prevention research, there continues to be a limited focus on women-specific HIV prevention issues. This study sought to: (1) identify gaps and contradictions in the knowledge of women’s HIV prevention needs; (2) generate a synthesized understanding of the conceptual frameworks expressed in the literature; (3) connect findings to policy responses at all levels of government; (4) produce new knowledge and provide recommendations for research, policy, and practice.

Methods: A critical scoping review of the literature was conducted on women and HIV in Canada, which identified over 150 articles published between 1996 and 2008. A total of 38 articles were selected for inclusion and meta-ethnographic analysis.

Results: The majority of articles studied women as a homogenous group and failed to take into consideration the diversity of women’s experiences in relation to HIV prevention. Furthermore, a lack of articles that address issues of sexual orientation or unequal power dynamics within sexual relationships was identified. The focus of HIV prevention for women in Canada has largely focused on empowerment through increasing HIV prevention training, without addressing political, economic, access issues. The Ministry of Labor is developing policy guidance to institutionalize the curriculum in vocational schools and colleges nationwide.

Conclusions: The majority of articles studied women as a homogenous group and failed to take into consideration the diversity of women’s experiences in relation to HIV prevention. Furthermore, a lack of articles that address issues of sexual orientation or unequal power dynamics within sexual relationships was identified. The focus of HIV prevention for women in Canada has largely focused on empowerment through increasing HIV prevention training, without addressing political, economic, access issues. The Ministry of Labor is developing policy guidance to institutionalize the curriculum in vocational schools and colleges nationwide.

Presenting author email: j.lammers@uva.nl

WEPE0260

Changing gender norms to prevent HIV in Vietnam: young women have something to say

L.T. Thuy Dung, L. Sherburne

Save the Children in Vietnam, HIV and Youth Health, Ha Noi, Viet Nam

Issues: In Vietnam, more than 80% of reported HIV cases are in men. Most women’s only sexual risk is their husband’s or boyfriend’s sexual behavior. Gender norms put women in a passive position to protect themselves and influence men’s sexual behavior. Save the Children worked with young men in vocational training schools to analyze barriers they face to become more gender equitable. Their analysis identified the importance of engaging young women in creating a supportive environment for change.

Description: The Save the Children and the Vietnam Ministry of Labor’s General Department of Vocational Training facilitate reflection of gender norms among young men and women through peer-led education sessions. More than 1,500 youth participate in weekly same-sex HIV prevention extra-curricular sessions with discussion on rights, sexual and reproductive health, substance use, communication and other skills. Selected sessions mix young men and women to enable them understand each others’ perspectives. Both young men and women express greater empathy for pressures that the other face and willingness to accept new, less traditional behaviors.

After a year, young women report greater understanding of women’s rights, greater confidence to speak up and reach out to peers to promote safer practices related to substance use and sex and willingness to openly talk with boyfriend about sexual matters to prevent in the relationship.

Next steps: The Ministry of Labor is developing policy guidance to institutionalize the curriculum in vocational schools and colleges nationwide.

Presenting author email: duonglt@savechildren.org.vn

WEPE0261

The impact of gender differences in HIV knowledge and risk perception on condom use

J. Lammers1, D. Willebrands2, S. van Wijnen3

1University of Amsterdam, Faculty of Economics and Business, Amsterdam, Netherlands, 2Amsterdam Institute for International Development, Amsterdam, Netherlands, 3SEO Economic Research, Amsterdam, Netherlands

Background: This paper analyzes how different types of HIV-knowledge influence condom use across the sexes.

Methods: The empirical work is based on a household survey conducted among 1,979 households of a representative group of market persons in Laos in 2008. Last time condom use is analyzed based on a Probit model while correcting for clustering effects. Next to socioeconomic characteristics, the data includes questions on HIV existence knowledge, HIV prevention, HIV stigma, intended pregnancy, and risk perceptions of engaging in unprotected sex.

Results: We observe a large HIV knowledge gap between males and females. Moreover, across the sex different types of knowledge are important in condom use. Low risk perceptions of engaging in unprotected sex and not knowing that condoms prevent HIV infection appear to be the best predictors for risky sexual behavior among men. The latter is also important in condom use among single females. Both factors, however, do not explain sexual behavior of married women, suggesting a lack of barriers for prevention decisions among married females or a general tendency of not using condoms among young women.

Conclusions: Our results call for programmatic approaches by differentiating the focus of HIV prevention campaigns for males and females including a separate focus for the married. Moreover, the large predicting power of high-risk perceptions of engaging in unprotected sex (while correcting for other HIV knowledge indicators) calls for further exploration of influencing these risk perceptions in HIV prevention programs in Vietnam.

Presenting author email: j.lammers@uva.nl
WEPE0263
Mainstreaming gender - reaching out to spouses through workplace programmes

E. Maziofa1, D. Mwaura2, J. Graaff3, L. Hubendick4
1Observatoire Régional de Santé d'Ile-de-France, Paris, France, 2INSERM
3University of Washington, Medicine, Nairobi, United States, 4University of
Washington, Biostatistics, Seattle, United States

Methods: The Women’s Interactive Screening to Establish Risk (WISER) is an
existing and effective computerized, self-administered HIV screening instru-
ment. Designed for implementation in a healthcare setting with women at
highest HIV risk due to their own drug use or that of a sexual partner, WISER
provides education and motivational messages. Based on these findings (see
below) and more recent findings indicating the inappropriateness of use with
women at risk for or experiencing violence, Social Solutions is working with
a group of experts and female survivors to adapt the instrument.

Results: Psychometric evaluation found the reliability and validity of WISER
to be good to excellent (Internal Consistency = 0.74, Test-Retest Reliability =
0.75). Effectiveness evaluations from the effectiveness evaluation included:
· 94% of women liked taking the screen on the computer
· 84% of women preferred the computerized method of questionnaire taking
· 89% of women reported the information they received after completing the
questionnaire was helpful

Conclusions: Despite the importance of, and opportunities for, screening,
healthcare providers do not regularly screen for HIV or violence among wom-
en patients. To address this issue, tailored screening instruments similar to
WISER-DV must be developed.

Presenting author email: njkarp@socialsolutions.biz

WEPE0264
Sexual risk taking after break-ups

N. Belzter1, C. Moreau1, M. Bozon2, N. Bajoci3
1Observatoire Régional de Santé d’Ile-de-France, Paris, France, 2INSERM
31018-CESP, Kremlin Bicêtre, France, 4INED, Paris, France

Methods: Data are drawn from the French national probability survey of
sexual behaviors conducted in 2006 among 4798 women and 4045 men aged
18-44yrs, who were interviewed by telephone. At the end of the interview,
a subsequent antibody was offered and the fnal screening test based on a vagi-
nal swab (women) or a urine test (men) that was sent to their home.

Results: A total of 1448 women (21%) and 1241 men (23%) experienced a
break-up in the last fve years. Five women and men who experienced a
break-up were more likely than others to report an STI over the same time period
(4.1% versus 3.1% for women, 3.2% versus 1.4% for men). They were also more likely to have a positive test for Chlamydia at the time of the
break-up (7.0% versus 5.8%, p<0.0009 for women and 2.8% versus
0.7%, p=0.008 for men).

Women and men who experience break-ups are more likely to report having used a condom with their new partner after the break-up (adjusted OR = 0.7, 95%CI[0.5-0.9]). Men were more likely to use a condom if their new partner was also involved in a
concomitant relationship (OR=0.6, 95%CI[0.4-0.9]). The same was not the
case for women.

Conclusions: Women and men who experience break-ups are exposed to
higher risks of STIs after the separation. Women are less likely to use a con-
dom after the break-up, but the change was uneven among women with
highest HIV risk due to their own drug use or that of a sexual partner, WISER
provides education and motivational messages. Based on these
findings (see below) and more recent findings indicating the inappropriateness of use with women at risk for or experiencing violence, Social Solutions is working with a group of experts and female survivors to adapt the instrument.

Results: Psychometric evaluation found the reliability and validity of WISER
to be good to excellent (Internal Consistency = 0.74, Test-Retest Reliability =
0.75). Effectiveness evaluations from the effectiveness evaluation included:
· 94% of women liked taking the screen on the computer
· 84% of women preferred the computerized method of questionnaire taking
· 89% of women reported the information they received after completing the
questionnaire was helpful

Conclusions: Despite the importance of, and opportunities for, screening,
healthcare providers do not regularly screen for HIV or violence among wom-
en patients. To address this issue, tailored screening instruments similar to
WISER-DV must be developed.

Presenting author email: njkarp@socialsolutions.biz

WEPE0265
Potential of female controlled contraceptives in preventing maternal infection HIV infection amongst postpartum women in Kenya

A. Ogoti1, F. Njiru1, J. Kiruthi2, G.C. John-Stewart1, C. Farquhar1,
B. Richardson3, M. Chung1, J. Kiarie4
1University of Nairobi, Obstetrics and Gynaecology, Nairobi, Kenya,
2University of Washington, Washington, Medicine, Nairobi, United States, 3University of Washington, Medicine and Epidemiology, Seattle, United States, 4University of Washington, Biostatistics, Seattle, United States, 5University of Washington, Medicine, Seattle, United States

Background: Undetected, maternal infection HIV infection increases the risk of
mother-to-child HIV transmission (MTCT). We sought to evaluate the cor-
relation between acceptability of female controlled contraceptive (FCC) meth-
ods, sexual risk behaviors and HIV sero-status.

Methods: We conducted a comparison of women 9 months post-
partum who had not been tested or had tested HIV negative antenatally, in
3 MCH clinics in Kenya. All women underwent education and demonstration of a
female condom, a vaginal diaphragm and a microbicide. They then answered
questions about sexual risk behavior, attitudes towards the use of FCC meth-
ods and then underwent HIV testing. All HIV positive were sent for detuned ELISA, Immunoglobulin G-Capture BED-Enzyme Immu-
nosay (BED-CEIA) to evaluate for recent infection.

Results: Overall HIV Incidence was 3.96/100 person years. 84 out of 4501
women had evidence of recent HIV infection based on BED-CEIA. HIV
infection was higher among women who had undergone antenatal screening
and testing compared to those who tested HIV positive antenatally (6.59 vs. 3.37
p=0.04). Women who though their spouses had had other sexual partners in
the perinatal period had greater odds of HIV infection (OR 1.822 95% CI
[1.01, 3.1]). Most women willing to use an FCC method preferred microbicides
(87%). Being defnitely willing to use any FCC method was associated with
lower HIV incidence however the difference was only statistically signifcant
for the vaginal diaphragm (2.94 vs 4.83 P=0.05). Assuming 50% effcacy and
50% uptake, female condoms, vaginal diaphragm and vaginal microbicides
would reduce HIV-1 incidence by 15%, 9% and 21% respectively.

Conclusions: In the perinatal period particularly with high risk partn-
ers are at high risk for HIV infection which may be antenatally counselling
and HIV testing. FCC can further reduce maternal HIV incidence and
MTCT although they may be more popular with lower risk women.

Presenting author email: abotsi@yahoo.com

WEPE0266
HIV/AIDS knowledge gaps and disparities in Egypt between 2005 and 2008

M. Salem
American University in Cairo, Social Research Center, Cairo, Egypt

Background: There are huge efforts done to raise HIV/AIDS awareness in
Egypt; however Egypt Demographic and Health Survey showed low level of
HIV knowledge. This study identifed trends and disparities in HIV
knowledge to guide future awareness interventions.

Methods: Secondary analysis of the EDHS data was done to track the ab-
solute changes in HIV knowledge among women aged 15-49 between 2005 and
2008. Concentration Index (CI) and relative change were used to mea-
sure disparities in knowledge and to show gender differences in EDHS 2008 respectively.

Results: Between 2005 and 2008, the percentage of women who have heard
about HIV/AIDS decreased by 1.3%.Their comprehensive HIV knowledge
increased by 16%, however knowledge about prevention methods deteriorated by
(65%, 35% and 9%) when women were asked about “abstinence, condom
use, and limiting sex to one uninfected partner” respectively. In 2008, women
were 2 times more likely to receive information about HIV from relatives or
friends than in 2005. TV inuence regressed by 9%.

In EDHS 2008, males were more educated about HIV/AIDS in all aspects
than females. Men were 1.5 times more likely to have comprehensive knowl-
edge. In younger age group (15-24) gender difference is tripled. The com-
prehensive HIV knowledge was skewed towards the highest wealth quintile
(CI=0.216). This skewness was observed among females (CI=0.312) more than
males (0.174).

Conclusions: The study showed that HIV knowledge is more accessible to
certain population subgroups like rich people and young males. Awareness ac-
Tendencies should expand to reach the less knowledgeable populations like disad-
antaged groups and older females. Media and TV should be more engaged in
spreading comprehensive HIV knowledge.

Presenting author email: dr_m_esam@yahoo.com
WEPE0267  Healthy loving is healthy living: community-based evaluation research on the efficacy of a single-session HIV prevention intervention for black women

D.D. Diallo1, T.W. Moore2, P.M. Ngailoge3, L.D. White4, J.H. Herbst5
1SisterLove Inc., Atlanta, United States; 2Centers for Disease Control and Prevention (CDC), Atlanta, United States

Background: SisterLove Inc., a community-based organization (CBO) in Atlanta, Georgia, USA, evaluated the efficacy of its highly interactive, single-session HIV prevention intervention for black women, the Healthy Love Party Workshop (HLPW).

Methods: The HLPW is delivered to pre-existing groups of women(e.g., friends, sororities) in settings of their choosing. Eligible groups of women were randomly assigned to receive the intervention (15 groups; 161 women) or a comparison workshop (15 groups; 161 women). Behavioral assessments were conducted at baseline and at 3- and 6-month follow-ups.

Results: Among sexually active women at the 3-month follow-up, HLPW participants were more likely than comparison participants to report having used condoms during vaginal sex with any male partner or with a primary male partner and to have used condoms at last vaginal, anal or oral sex with any male partner. At the 6-month follow-up, HLPW participants were more likely to report condom use at last vaginal, anal or oral sex with any male partner and having an HIV test and receiving their test results.

Conclusions: The study findings suggest that a single-session intervention delivered to pre-existing groups of black women is an efficacious approach to HIV prevention. This study also demonstrates that a CBO can develop and deliver a culturally appropriate, effective HIV prevention intervention for the population it serves and, with adequate resources and technical assistance, rigorously evaluate its own intervention.

Presenting author email: ditaallo@sisterlove.org

WEPE0268  Urgent need for HIV/AIDS programming scale up among women in Nigeria: evidence from South East Nigeria mobile HIV counseling and testing intervention

O. O зар1, E. Ake2
1Society for Family Health, Research and Evaluation, Abuja, Nigeria; 2Society for Family Health, Field Operations, Enugu, Nigeria

Background: HCT is an important strategy in HIV/AIDS programming as it serves as an entry point to programs. In Nigeria, 55.7% of males and 48.9% of female age 15 - 49 years know where to get an HIV test, while only 14% had ever gone for the test. Of those who had the HIV test, 72.7% received their result. To increase the number of persons with access to HCT service, the Society for Family Health with funding from the United States Agency for International Development, introduced mobile HCT services to its other health intervention.

Description: Mobile HCT guideline was developed, reviewed and accepted for use by the state government. HCT counselors were trained and deployed. Rural communities were mapped. On special days and occasions, free mobile HCT services were provided. HIV treatment centers were identified where positive cases were referred. Community leaders and members were mobilized. Each HCT counselor and tester was given a register with unique coding. Persons referred were given a referral card.

Lessons learned: Within a period of 8 months, it was observed that 61% of persons who tested negative received their test results. While females accounted for less than 38% of those tested, they accounted for over 65% of those who tested positive. Of the proportion of those that were referred who accessed further treatment and social support services, females accounted for a little above 45%.

Next steps: Proportion of women positive is relative high while service reach among them bears more than proportional burden of HIV/AIDS in Nigeria. Presenting author email: ozierre@yahoo.com

WEPE0269  An external evaluation of a peer-run outreach-based syringe exchange in Vancouver, Canada

K. Hayashi, E. Wood1, L. Wiese, J. Qi, T. Kerr
1British Columbia Centre for Excellence in HIV/AIDS, Urban Health Research Initiative, Vancouver, Canada, 2University of British Columbia, Interdisciplinary Graduate Studies Program, Vancouver, Canada, 3University of British Columbia, Faculty of Medicine, Vancouver, Canada, 4Vancouver Area Network of Drug Users (VANDU), Vancouver, Canada

Background: Vancouver, Canada has been the site of an epidemic of human immunodeficiency virus (HIV) among injection drug users (IDU). In response, the Vancouver Area Network of Drug Users (VANDU) initiated a peer-run outreach-based syringe exchange program (SEP) called the Alley Patrol. We conducted an external evaluation of this program, using data obtained from the Vancouver Injection Drug Users Study (VIDUS).

Methods: Using generalized estimating equations (GEE), we examined the prevalence and correlates of the VANDU Alley Patrol SEP use among VIDUS participants followed up from 1 December 2000 to 31 December 2003. Outcomes: In total, 854 active IDU were included in this analysis, with 233 (27.3%) participants reporting use of the VANDU Alley Patrol SEP during the study period. In multivariate GEE analyses, the use of the service was positively associated with unstable in housing adjustable Odds Ratio [AOR] = 1.83, 95% Confidence Interval [CI]: 1.39 - 2.40), daily heroin injection (AOR = 1.31, 95% CI: 1.01 - 1.70), daily cocaine injection (AOR = 1.34, 95% CI: 1.03 - 1.73), injecting in public (AOR = 3.07, 95% CI: 2.32 - 4.06), and negatively associated with needle reuse (AOR = 0.65, 95% CI: 0.46 - 0.92).

Conclusions: The VANDU Alley Patrol SEP succeeded in reaching a group of IDU at heightened risk for adverse health outcomes. Importantly, access to this service was associated with lower levels of needle reuse. This form of peer-based SEP may help to extend the reach of conventional HIV prevention programs by reaching IDU traditionally underserved by conventional syringe exchange programs.

WEPE0270  Peer driven intervention as a powerful tool to recruit women and young drug injectors to prevent HIV

O. Datšenko1, R. Broadhead2
1Global HIV/AIDS Alliance’s National Programmes, Kyiv, Ukraine; 2University of Connecticut, Sociology, Salt Lake City, United States

Issues: Peer Driven Interventions (PDI) were launched in Ukraine in 2007 and have since reached 26,936 new injection drug users (IDUs) in 37 PDI sites implemented throughout the country. The PDI also demonstrated remarkable ability to reach hard-to-reach subgroups of IDUs: 40% of new respondents are women and 60% are youth (< 25 years old). These subgroups were grossly underserved by traditional Harm Reduction (HR) outreach services that operated for many years prior to the PIDs; only 20% of the respondents were women and 30% youth.

Description: A PDI is a chain-referral outreach mechanism that relies on IDUs to recruit their peers and educate them about HIV prevention. IDUs receive nominal cash rewards of 20 UAH (11.5 UAH = 1 euro) for being recruited by a peer-recruiter to a PDI site and undergoing a risk-assessment interview. All recruiters are offered the opportunity to become peer-recruiters as well. Recruiters are given recruitment coupons to educate and recruit 3 peers, and bonuses of 10 UAH for recruiting women and young IDUs. Recruiters’ educational efforts are measured by an 8-item knowledge test administered to recruiters and recruiters can earn up to 24 UAH per recruit. Each project site requires only 2-3 full-time Health Educators to administer.

Lessons learned: The PDI model is effective for recruiting and educating large numbers of IDUs. Average PDI recruitment is 150 new IDUs per month per site vs. HR coverage which averages only 5 new recruits per month in 10 sites. The model works especially well in closed drug scenes where outreach workers have limited access.

Next steps: HIV prevention projects may use PDIs to rapidly increase coverage of hidden subgroups. To enhance effectiveness, projects must constantly update the educational materials they give respondents to ensure relevance and sustain interest.

Presenting author email: datsenko@aidsalianc.org.ua

WEPE0271  Analysis of HIV related knowledge and behaviour among IDUs reached by peer-driven intervention in Lithuania

L. Stonienė1, S. Rotberga1, S. Kulsis2
1UNODC Project Office for the Baltic States, Vilnius, Lithuania, 2Association of HIV Affected Women and their Families “Demetra”, Vilnius, Lithuania

Background: Drug injection is the main HIV transmission mode in Lithuania. Recent research shows that HIV prevalence among injecting drug users (IDUs) has increased from 1% in 2005 to 8% in 2008. Aiming to evaluate HIV related knowledge and behaviour of IDUs and to increase coverage of services for IDUs, peer-driven intervention (PDI) was started in Vilnius in 2009. The study was supported by UNODC project ‘HIV/AIDS prevention and care among IDUs’ and in prison settings in Estonia, Latvia and Lithuania’.

Methods: A 15 question questionnaire was used to evaluate knowledge and practice of IDUs. Data was collected during 115 PDI interventions in 2010. Data was collected using an interview. Data was analyzed using BMDP Statistics.

Results: 99% of the IDUs knew transmission modes of HIV, whereas only 21% knew prevention methods. More than half of the IDUs (52.9%) used condoms during last sexual contact, whereas 65% of women (12.5%), 70% of men used them (6.8%). Among intravenous drug users, 68.1% used the common needle, whereas 31.9% used their own needle. The majority of the IDUs (90.7%) did not use a syringe exchange program.

Conclusions: Based on the results, the PDI can be a powerful tool for reaching IDUs and improving knowledge and practice related to HIV prevention. However, PDIs require more resources for their implementation and sustainability.

Presenting author email: l.stonienė@netservis.lt
WEPE0272
High coverage of injecting drug users (IDUs) with comprehensive HIV prevention services reduces HIV risk in Central Asia
A. Deryabina1, D.S. Haupner1, B. Bakukiniva1, S. Ashimova1, Y. Kudussova1, Z. Musaeva1, H. Nazarova2, L. Khodakevich3
1NIHR Alcohol and Drug Treatment Research Unit, Institute of Medicine, Kazakhstan; 2JSI Research & Training Institute, Inc., International Division, New Delhi, India; 3JSI Research & Training Institute, Inc., Bishkek, Kyrgyzstan; National AIDS Centre, Research & Training Institute, Inc., Dushanbe, Tajikistan; 3JSI Research & Training Institute, Inc., Tashkent, Uzbekistan

Background: HIV epidemics in Central Asia are concentrated mostly among IDUs. Coverage of IDUs with HIV prevention services tends to be low. JSI implemented the TUMAR Project (funded by the Central Asia AIDS Control Project and USAID) for 18 months to increase coverage of IDUs with comprehensive HIV prevention services in five sites in four Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan). The aim was to increase HIV risk and slow transmission. Of particular interest was the intervention effect on non-participating IDUs in the project sites.

Methods: The project included five components: provision of needles/syringes and condoms; HIV prevention education; referral to medical services; risk reduction training and testing services. Services were provided at drop-in centers and through outreach. Anonymity of coverage data was collected routinely. An endline (n=751) survey was conducted in three sites each to measure changing risk behaviors and knowledge about HIV.

Results: 6,065 IDUs (81% of the estimated target population) were ever reached during the project, 61% of which were regular participants (>4 project-related contacts). At endline, compared to control sites, IDUs in project sites were more likely to have: never shared needles/syringes during the last 12 months; and used a condom during the last sexual intercourse (60% vs. 37%); and correctly identified HIV transmission modes and prevention methods. Non-participants from the project sites were more likely to practice safer injecting behaviors during the last month (OR=4.8) and in last 6 months (OR=2.8) than respondents from control sites.

Conclusions: Coverage to reduce HIV transmission was achieved when comprehensive HIV prevention services were available and utilized widely among IDUs, including among non-participating IDUs in the project sites. Funds are needed for maintenance and scale-up of these efforts to have a lasting effect on HIV transmission.

Presenting author email: loreta.stonie@unodc.org

WEPE0273
Opioid substitution treatment in Central Asia: barriers and opportunities for advocacy
D. Otiashvili1,2, A. Latypov1, O. Aizberg1, A. Boltaev1
1Eurasian Harm Reduction Network, Vilnius, Lithuania; 2Union Alternative Georgia, Addiction Research Center, Tbilisi, Georgia

Background: In the countries of Central Asia, the main driving force behind the HIV epidemic is injecting drug use. Out of five former Soviet Central Asian countries, only one provides Opioid Substitution Treatment (OST). None of the countries where OST has been available has managed to reach even 5% of the estimated IDU population.

Aim: The goal of this study was to analyze current legal, political and pro-grammatic environment surrounding OST programs in Central Asia, and develop recommendations for promoting the expansion of OST in the region

Methods: Eurasian Harm Reduction Network (EHRN) conducted an analysis based on: 1. OST related publications and reports available locally, and consultations and interviews conducted with key informants in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan. Significant part of the information was provided by national experts and government officials on national legislation, strategies, programs, decrees, legal documents, manuals and procedures related to OST. An important role in the analysis of problems and the drawing up of recommendations was played by representatives of govern-ment services, NGOs and international organizations, who took part in the consultations meeting on OST advocacy in Central Asia, which took place in February 2010.

Results: Major barriers for OST expansion were identified as follows: “politi-cal” and the topic of non-prioritization of the issue among decision mak-ers; legal and ideological barriers; poor uptake among patients. Major prog-rammatic barriers such as obligatory registration of clients, high threshold for criteria for inclusion, short treatment duration; lack of special literature available in national and Russian languages.

Conclusions: Advocacy efforts should focus on the reforming OST related legislation, increasing capacity building of professionals; lack of special literature available in national and Russian languages.

WEPE0274
A comprehensive approach to drug user health building on HIV
H. Cruz1, A. Cardenas1, D. O’Connell1, S. Stancliff2
1New York State Department of Health, AIDS Institute, New York, United States; 2Harm Reduction Coalition and Consultant/NYSDDH AIDS Institute, New York, United States

Issues: A comprehensive approach to public health implies that all commu-nities and individuals be involved in its focus. Substance users are no exception, and government agencies are responsible for ensuring this inclusiveness. The experience of New York State, informed by its response to the HIV epidemic, is instructive.

Description: The New York State Department of Health’s AIDS Institute has spearheaded several statewide initiatives addressing the health needs of sub-stance users: placing HIV counseling and testing services within substance abuse treatment programs; co-locating HIV primary care within these same settings; fostering access to sterile syringes through comprehensive, harm-reduction-oriented syringe exchange programs; expanding non-prescription syringe access through other programs; education of state and local C prevention, screening and treatment in community-based settings; providing alterna-tive means for disposing of contaminated sharps; fostering opioid overdose prevention programs through take-home naloxone provided to individuals in substance users’ social networks; and promoting HIV clinical guidelines which specifically address the needs and issues of active substance users.

Lessons learned:
• Include drug users early on in the planning, implementation and evaluation of programs and maintain their involvement.
• Integrate expanded substance user-oriented services into traditional drug treatment programs.
• Build programs incrementally and encourage cross-program integration;
• Engage in consultations with others who have led the way;
• Use funding streams creatively to achieve synergy and maximize resources;
• Work with other government agencies at all levels as well as with various community stakeholders, including law enforcement and advocacy groups;
• Educate constituencies so they understand the value of expanded options in meeting common objectives;
• The entire community benefits from protecting drug users’ health.

Next steps: We have been successful in dramatically reducing injection-re-lated HIV transmission. We need to maintain this success and replicate it with respect to sexual transmission of HIV among drug users.

Presenting author email: hxc01@health.state.ny.us

WEPE0275
Buprenorphine plus syringe access: an effective harm reduction strategy
S. Stancliff1, H. Joseph1, T. Furst1
1Harm Reduction Coalition, New York, United States; 2John Jay College of Criminal Justice, New York, United States

Issues: Buprenorphine is safe and effective medication in the treatment of heroin addiction and reduces heroin injection thereby reducing the risk of HIV infection. However in many countries it is tightly regulated, patients must enter care in a medical setting and in some settings patients are discharged from treatment if they do not adhere closely to appointments and the plan of care.

Description: The Harm Reduction Coalition piloted low-threshold provision of naloxone with some patients being recruited and initiated in treatment at Syringe Exchange programs. 100 patients initiated treatment at SEPs or via patient networks. Patients were accepted even if the goal was not abstin-ence but more control over use. Retention was similar to those found in the medical literature except that patients cycled in and out of treatment. Rea-sions included attempts at tapering, return to heroin use, loss of finances to purchase buprenorphine and travel. Many patients stabilized after 1-2 episodes of treatment.

Lessons learned: Buprenorphine can be prescribed successfully at SEPs where participants welcome it. Many patients may benefit from a flexible ap-proach allowing for patients to select their own goals and to leave treat-ment for periods without sanctions. The cycling nature of treatment for many patients underscores the need to support continued syringe access in addition to buprenorphine.

Next steps: Models offering buprenorphine in nontraditional settings such as SEPs and with flexible structure for admission and retention in treatment should be explored.

We encourage work that introduces new ideas and conceptualizations, research and understandings to the field, as well as analysis of both success and failure.

Presenting author email: stancliff@harmreduction.org
WEPE0276
Advancing an evidence-based integrated HIV and overdose prevention intervention for injecting drug-involved couples in Kazakhstan: project renaissance
2. Columbia University, School of Social Work, New York, United States

Background: The sharply rising rates of HIV, HCV and sexually transmitted infections (STIs) among drug users (IDUs) and their sexual partners in Kazakhstan underscore the need for interventions which address both sexual and drug-related HIV risks. Moreover, the high rates of opiate among IDUs in Kazakhstan, highlight the need for interventions that integrate HIV and overdose prevention.

Methods: Project Renaissance began with a pilot trial to adopt and test the feasibility, and preliminary effects of a couple-based HIV prevention intervention for IDUs and their sexual partners in Kazakhstan. Of the 40 IDU couples enrolled in a pilot randomized controlled trial, 20 couples were randomized to a 4-session CHSR intervention (n=40 participants) and 20 couples were randomized to the 4-session Wellness promotion comparison condition (WP) (n=40 participants). Participants were assessed with repeated measures at baseline and 3-month post intervention.

Results: Compared to WP participants, CHSR participants were significantly more likely to report a higher proportion of condom protected acts, fewer acts of unprotected sex, and lower number and proportion of injection acts in which syringes were shared from baseline to 3-month follow-up. However, in a year after completing the intervention 4 participants (5%) died from overdose.

Conclusions: This pilot trial demonstrated the feasibility and safety of the CHSR and showed preliminary effects of the CHSR in reducing both drug-related and sexual HIV risks among this sample of IDUs in Kazakhstan, but underscored the need for opiate prevention. Project Renaissance recently obtained funding from NIDA to test the efficacy of an integrated 5-session HIV/STI reduction and overdose management intervention using Naloxone in a randomized controlled trial with 400 injecting drug-involved couples in Almaty, Kazakhstan. This integrated intervention may be scaled up in syringe exchange programs across Kazakhstan if shown to be effective.

Presenting author email: teg123@coloumbia.edu

WEPE0277
Methadone clinic clients HIV incidence in Yunnan, China
L. Duo
1. HAARP: Yunnan Office, Kunming, China

Background: HIV/AIDS Asia Regional Program Project (HAARP) focus on IDU high risk behavior comprehensive intervention including Methadone Maintenance Treatment (MMT). A little has been known about MMT client HIV incidence and related risk behavior behind it. HAARP & GF in Yunnan explores the fact.

Methods: All MMT based clients from 12 counties in Yunnan, China being recruited for the research, with all clients meets Chinese MMT admission criteria. All ILISA confirmed HIV negative clients joined prospective cohort study with questionnaire and HIV blood test every six months. Following in depth interviews were carried out to explore the high risk behavior reasons.

Results: 1129 HIV negative jointed cohort study out of total 1935 clients (75 refused). Baseline HIV-positive rate reached 37.76%. 894 patients remained within the studying after six months with 21% drop off rate. 12 Confirmed HIV-positive out 894 clients after half year. HIV incidence was 2.68 per 100 person-years. Sexual high risk behavior, sneak heroin injection and share the needle are the major reasons contributed to 12 HIV-positives.

Conclusions: Comprehensive intervention at MMT clinic is necessary and important to further reduce possible new HIV infection among clients. Safe sex consultation and regular multi drug urine test are necessary to reduce the heroin injection during MMT period.

Presenting author email: duolin@hotmail.com

WEPE0278
Seven years of cross-border HIV prevention interventions in Lang Son, Vietnam and Ning Ming County, China: two estimation methods reveal sharp declines in HIV incidence among injection drug users
T.M. Hammett1, D.C. Des Jarlais2, R. Kling3, B. Kieu1, N. Doan4, T. Nguyen5, S. Yegeubayeva6, A. Brisson7, T. Vu7, T. Tran7, M. Donghua7
1. Columbia University, School of Social Work, New York, United States
2. HAARP Yunnan Office, Kunming, China
3. National Drug Research Institute, Melbourne, Australia
4. Thai National AIDS Foundation, Support Program, Phayathai, Thailand
5. Thai Drug Users Network, Nonthaburi, Thailand
6. University of British Columbia, Vancouver, Canada
7. National Drug Research Institute, Melbourne, Australia

Background: Since 2002, we implemented HIV prevention interventions for IDUs in Lang Son Province, Vietnam and Ning Ming County (Guangxi), China: peer education and needle/syringe distribution, directly and through pharacy vouchers.

Methods: Evaluation employs serial cross-sectional surveys of IDUs (be-having and non-having HIV testing) with sampling by modified “snowball” method and 250-300 respondents per wave, resulting in one of the longest data series on IDUs in Asia. Primary outcomes were HIV risk behaviors, HIV prevalence and incidence. We used 2 methods: 1) BED-based estimates revealed significant reductions in HIV prevalence among IDUs in Lang Son (Spearman rank correlation 23% [p=0.00] and Ning Ming:17%-11% [p=0.003]). New injector analysis revealed significant declines in HIV incidence through 36 months, then uneven patterns (but with wide 95%CI), suggesting some infections through sexual contact prior to injector injection. BED-based estimates revealed significant reductions in incidence through 84 months (with much narrower 95%CI).

Results: We found significant declines in drug-related risk behaviors and HIV prevalence among IDUs (Lang Son: Spearman rank correlation 23% [p=0.00] and Ning Ming:17%-11% [p=0.003]). New injector analysis revealed significant declines in HIV incidence through 36 months, then uneven patterns (but with wide 95%CI). Project Renaissance recently obtained funding from NIDA to test the efficacy of an integrated 5-session HIV/STI reduction and overdose management intervention using Naloxone

Conclusions: Combined trends from 2 methods show sharp declines in incidence to low levels, indicating that the IDU epidemic is under control. New injector analysis may be best suited to newer epidemics where most IDUs are infected through drug use; BED method can produce good estimates through an epidemic. In Ning Ming, correlation coefficient for 2 methods, baseline-36 months, was 0.8372.

Presenting author email: ted_hammett@abtassoc.com

WEPE0279
Supporting information for the development of capacity building models for drug users
K. Sowonko, S. Puekchaisri
1. Thai National AIDS Foundation, Support Program, Phayathai, Thailand
2. Thai Drug Users Network, Nonthaburi, Thailand

Background: In Thailand, drug users are stigmatized as criminals when they are actually most at risk population owing to their vulnerability in physical, emotional and social aspects. 30% of drug users are HIV infected. Most drug users related programs in Thailand focus on two extreme ends of the problem; drug use prevention and treatment, leaving the group in the middle unattended. The drug users should receive capacity building and strengthening to be able to take care of themselves and prevent themselves from HIV/AIDS. Specific capacity building model for drug users need to be developed therefor, the in dept study of drug users is conducted to best design the model.

Methods: In collaboration of drug user networks and related partners, 176 cases of drug users from 4 regions of Thailand were selected to examine their views and experiences of drug use, health knowledge level and needs.

Results: Main causes of drug use are for pleasure (32.9%) and to reduce problems (23.5%). 26% of the studied drug users do not have drug and HIV related health knowledge. 68.2% of them admit that drug use cause them more problems. The needs of the drug users include; knowledge on health including HIV/AIDS and STIs (47.6%), drug related knowledge (37.4%), social acceptance (24%) and drug users rights related knowledge (20%) and the need to quit drug use (17%). However, a significant number of the respondent (48.9%) do not believe that training, formal informing and media are effective or appropriate ways of communications with drug users.

Conclusions: -Peer support and education is more responsive, effective and accessible in providing capacity building for drug users.

The capacity building tools shall be developed for both drug users and the community focusing on the rights and choices of drug users and responding to their needs.

Presenting author email: krimsstb@hotmail.com

WEPE0280
Injection drug users’ access to a supervised injection facility in a canadian setting: the influence of operating policies and regulations
W. Simgi, J. Shovelier, D. Moore, M. Tyndall, T. Kerr
1. BC Centre for Excellence in HIV/AIDS, Vancouver, Canada
2. University of British Columbia, School of Population & Public Health, Vancouver, Canada
3. National Drug Research Institute, Melbourne, Australia

Background: While supervised injection facilities (SIFs) have been shown to reduce HIV risk behaviour among injection drug users (IDUs), there has been limited examination of the influence of operational features upon IDUs’ access to SIFs. We sought to examine how the operation and regulations of Vancouver’s SIF affects IDUs’ utilization and the potential of the facility to reduce HIV risk behaviour in the local context.

Presenting author email: krimsstb@hotmail.com
WEPE0281

A peer-led educational campaign targeting unsafe injecting among people who inject drugs

C. Callon1, N. Latham2, L. Wiebe2, R. Macklin2, T. Kerr3

1BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 2Vancouver Coastal Health, Vancouver, Canada

Issues: Despite awareness that unsafe injection is associated with increased risk of HIV, hepatitis B and C, and drug-related deaths, injection practices among people who inject drugs (PWD) remain unaltered. Strategies to engage PWD to understand the limitations of drug injection practices and to adopt safer injection practices continue to be effective. Using evidence generated through a community-based research collaboration, members of the Injection Support Team (IST) developed a participatory education approach that draws on research findings, outreach activities, and community consultation, the IST developed curriculum, training materials, and novel demonstration models that are effective in a wide range of environments and settings. Specific ISP shop topics include dangerous injection practices (e.g., jugular and assisted injection), how to safely inject and use elements of the facility to 12 injecting booths. In light of the magnitude of the large local public health implications, federal regulations governing supervised injection facilities to 12 injecting booths. In light of the magnitude of the large local public health implications, federal regulations governing supervised injection facilities to 12 injecting booths. In light of the magnitude of the large local public health implications, federal regulations governing supervised injection facilities allow for the opening of SIFs in an area with a target of 18,000 IDUs. The process of micro planning has helped the NGOs to identify service barriers in order to develop different strategies.

Description: 1. Social network mapping - A Social Map captures places where IDUs live and congregate (hotspots etc.) and places where IDUs are provided1. IDU risk assessment - The risk/vulnerability parameters should, at a minimum include: types of drugs injected, frequency of injections, sexual transaction frequency, disclosure of HIV status (to family or others).

Next steps: If all the steps are followed we can easily identify the service barriers, risk reduction knowledge and knowledge about HIV among IDUs so that the services can be tailored to meet the needs for each particular area. Presenting author email: asonshimray@gmail.com

WEPE0284

Prevention of HIV spread in Ukraine through the expansion of substitution treatment is lacking contributions from state budget

T. Peregutlya, S. Filippovych, Z. Islam, O. Lebeqa

ICP "International HIV/AIDS Alliance in Ukraine", Treatment, Procurement and Policy, Kyiv, Ukraine

Issues: < 60-70% of IDUs in Ukraine are infected with HIV. Growing sub- stitution maintenance treatment (SMT) opens new treatment slots for IDUs suffering from opioid dependency, allows IDUs improve quality of life, expands their access to HIV services and prevents HIV spread. This effective public health intervention is organized under GFATM Rd 6 funded Program and SUN- RISE USAID supported Project. Both are run by ICF "HIV/AIDS Alliance in Ukraine" (AU). State made no Investments to ensure HIV prevention through SMT scale up.

Description: AU started SMT with buprenorphine in 2005. Significant SMT expansion was achieved over 2008-2009 when AU introduced cost effective methadone based treatment as shown below. 5078 patients were getting SMT in 102 healthcare institutions in 26 regions at the end of 2009. All patients receive treatment along with psychological and social support for free. Staff in charge of SMT patients are well trained, 12-month long monitoring and evalu- ation studies (MES) on the effectiveness of buprenorphine and methadone based SMT were conducted. AU procured SMT drugs over 2005 -2010 for the expense of external donors only.

Lessons learned: Blood Bong Virus Transmission Assessment Questionnaire utilized over the MES shows significant decrease in risky behavior among SMT patients. SMT is to be expanded to address patients' needs and affect HIV/AIDS epidemic.

Next steps: AU programmatic goal is to support 11300 SMT patients by August 2012. State should follow WHO recommendations and ensure SMT provision for 58,000 patients in the nearest future. Contributions from state budget towards SMT development are expected.

Presenting author email: peregyutsia@aida.gov.ua
WEPE0285 Will pharmacists sell non-prescription syringes to prevent HIV among IDUs? Assessment after legal change in Boston, Massachusetts, USA

P. Case1, A.L. Reiter2, J.W. Gagnon3, Z. Lazarrini4
Fenway Health, The Fenway Institute, Boston, United States, 1University of Connecticut Medical School, Division of Public Health Law & Bioethics, Farmington, United States

Background: Increasing access to sterile syringes is a key HIV intervention for injection drug users (IDUs). In 2006, Massachusetts (a US state), changed the law to permit purchase of syringes in pharmacies by anyone 18 years or older with a photo ID. Pharmacists are permitted but not required to sell syringes; sales must include printed information on safe disposal. In 2009, we assessed availability of nonprescription syringes in Boston, Massachusetts pharmacies 3 years after the law change.

Methods: Boston pharmacies were identified from directories and through personal visits verified as retail pharmacies open to walk-in customers. After excluding pharmacies not meeting study requirements, including institutional pharmacies, we found 90 retail pharmacies in Boston. ‘To assess pharmacists’ willingness to sell nonprescription syringes, a 20-year-old white male research assistant (RA) attempted to purchase a syringe in each pharmacy. Using an IRB-approved script, the RA approached the pharmacy counter and attempted to purchase between 1 and 10 syringes similar to those used by IDUs.

Results: The RA successfully purchased syringes in 71 pharmacies (78.9%), was provided a syringe without charge in one pharmacy (1.1%), and was unable to purchase syringes in 18 pharmacies (20%). In pharmacies where purchase was possible, photo identification was checked in 65.3% of purchases, disposal information was provided in 33.3% of purchases, and the median price per syringe was 30 cents (range: USD $0.23 - $3.00). Nonprescription syringes bought in Massachusetts are taxable; tax was not charged in 57% of purchases.

Conclusions: Three years after the law change, access to nonprescription sterile syringes in Boston pharmacies is good (>75%), although variation exists in distribution of required disposal information and taxation. Additional outreach and training may persuade pharmacists who currently don’t sell syringes of the importance of this structural intervention to prevent HIV among IDUs.

Presenting author email: pcased@fenwayhealth.org

WEPE0286 Findings of the Bio-behavioral surveillance surveys among injecting drug users as a tool for preventive program planning in Georgia

J. Chikovani1, K. Gogadze2, S. Ranade3, M. Wettlub4, N. Rukhadze5
1Curatio International Foundation, Tbilisi, Georgia, 2John Hopkins Bloomberg School of Public Health, Baltimore, United States

Background: The prevalence of HIV in Georgia is currently low but increasing. Injection drug use is a major route for HIV transmission. Annually almost half new cases are diagnosed late at the AIDS stage. Analyses aimed to generate evidence to inform preventive program planning among IDUs.

Methods: In 2008-09 five cross sectional, anonymous surveys of IDUs were undertaken in Georgia cities: Tbilisi, Batumi, Zugdidi, Gori, Telavi with RDS methodology. Analyses used nonresponse weighted five studies combined datasets, therefore, the sample is standard snowball. 1,127 residents from given locations, aged ≥18 years and injected within last month were recruited. Interview and HIV voluntary blood testing were done.

Results: Majority of IDUs were male, 49% married, 48% started injecting before 21 years old. Majority had knowledge about HIV transmission / prevention, 25% had ever been tested for HIV, 13.9% were reached by prevention programs. In univariate analysis anti-HIV positive prevalence correlate (p<0.05) with age, drug use duration, history of imprisonment, city of residence. The multivariate analysis reveals major predictor - injection duration.

Conclusions: Guidance note for preventive programming:

- Geographically targeted interventions covering in walk-in customers. After excluding pharmacies not meeting study requirements, including institutional pharmacies, we found 90 retail pharmacies in Boston. ‘To assess pharmacists’ willingness to sell nonprescription syringes, a 20-year-old white male research assistant (RA) attempted to purchase a syringe in each pharmacy. Using an IRB-approved script, the RA approached the pharmacy counter and attempted to purchase between 1 and 10 syringes similar to those used by IDUs.

Results: The RA successfully purchased syringes in 71 pharmacies (78.9%), was provided a syringe without charge in one pharmacy (1.1%), and was unable to purchase syringes in 18 pharmacies (20%). In pharmacies where purchase was possible, photo identification was checked in 65.3% of purchases, disposal information was provided in 33.3% of purchases, and the median price per syringe was 30 cents (range: USD $0.23 - $3.00). Nonprescription syringes bought in Massachusetts are taxable; tax was not charged in 57% of purchases.

Conclusions: Three years after the law change, access to nonprescription sterile syringes in Boston pharmacies is good (>75%), although variation exists in distribution of required disposal information and taxation. Additional outreach and training may persuade pharmacists who currently don’t sell syringes of the importance of this structural intervention to prevent HIV among IDUs.

Presenting author email: pcased@fenwayhealth.org

WEPE0287 Triangulation of behaviour, service utilization and prevalence data in drug users, South-West China

Q. Wu1, C. He2, L. Dupo3, Y. Chen1, L.M. He1, Y.Y. Wang1, Y. Zhang1, F. Yang1, J. Liu1, L. Yu1, Y. Chen1, Y. Zhou1, X. Zhang4
1Kuming Medical Institute, Epidemiology & Statistics Department, Kunming, China, 2Kuming Medical University, Kunming, China, 3Global Fund Round 4 Project Office for Yunnan Province, Kunming, China, 4Simao City Center for Disease Control and Prevention, Simao, China, 5Simao County Health Bureau, Simao, China, 6Dali City Health Bureau, Dali, China, 7YUNNAN Center for Disease Control and Prevention, Kunming, China

Background: Drug users in 5 cities of Yunnan province, where China had seen its oldest HIV epidemic, were sampled to compare risk behavior and HIV-positiveness with access to HIV-prevention services.

Methods: Between March and August 2006, drug users (DUs) were interviewed and tested for HIV antibody in 5 cities of Yunnan Province ali, located in highly affected areas (HIV-prevalence among IDUs higher than 10%). Participants were sampled using both network-based and institution-based methods (through peer educators and in detoxification centres for incarcerated DUs).

Results: In total, 685 DUs (79% men, 21% women) were investigated, including 540 reporting injecting drug use. HIV-prevalence was 32% (min. 3%, max. 66%). The city with lowest HIV-prevalence in DUs had lowest proportion of DU respondents reporting needle sharing (10% vs. 51%). and highest proportion of DUs reporting consistent condom use (30% vs. 15%). The city with second lowest HIV-prevalence in DUs (18%) reported highest access to methadone treatment (45% vs. 33%), needle exchange (20% vs. 16%), condom distribution (26% vs. 18%) and being instructed about condom use (44% vs. 31%).

Conclusions: This study could elucidate disparities of HIV/AIDS response at the sub-provincial level in PR China. Some communities of drug users with better access to HIV-prevention services may be involved less frequently in sex- and drug-related risk behaviour, and have lower HIV-prevalence rates, in comparison with others with less access to these services.

Presenting author email: wuqin_elisa@yahoo.com.cn

WEPE0288 Resistance to adopt and fully implement a successful harm reduction program of distributing drug and injection preparation equipment negatively impacts the rights to health and access to healthcare resources for injection drug users in Ontario, Canada

K. Smith1, L. Leonard2, E. De Rubes3, A. Germain4, N. Birkett5, HIV and HCV Prevention Research Team
1University of Ottawa, Ottawa, Canada

Background: People who inject drugs (IDUs) can acquire HIV and hepatitis C (HCV) infection through sharing injection and drug preparation equipment. In Canada in 2006, the Ontario Ministry of Health provided annualized funding of one million dollars (CAD) to operate Ontario’s Harm Reduction Distribution Program (OHRP): responsibility for implementing the OHRP lies with each region’s Medical Officer of Health (MOH). The OHRP provides cost-free water ampolles, tourniquets, alcohol pads, filters and cookers to the 37 needle and syringe programs (NSPs) throughout Ontario, Canada.

Here, we examine the impact of the availability of additional harm reduction resources on the HIV- and HCV-related practice of the multi-person use of drug and injection preparation equipment among IDUs in 26 cities in Ontario.

Methods: 1,622 street-recruited adult IDUs were interviewed between September 2006 and August 2007. IDUs were classified into two groups. The ACC group contained IDUs whose local NSP had implemented the program for >2 months and the NOACC group those IDUs whose local NSP had not implemented the program or had implemented it for ≤2 months at the time of interview. Chi-square tests determined differences in sharing practices between groups.

Results: 26% of participants in the ACC group and 37% in the NOACC group reported sharing cookers (p<0.000); 21% in the ACC group and 27% in the NOACC group reported sharing water (p<0.05); 13% in the ACC group and 20% in the NOACC group reported sharing filters (p<0.000); and 21% in the ACC group and 27% in the NOACC group reported sharing tourniquets (p<0.01).

Conclusions: In Ontario cities where IDUs had established access to drug and injection preparation equipment, significantly lower injection drug sharing were observed. The resistance from MOHs to fully implement the OHRP is negatively impacting the rights to health and healthcare resources of IDUs in Canada.

Presenting author email: skate071@uottawa.ca

WEPE0289 Harm reduction as a basis for integrated services to prevent HIV among drug users

P. Smyrakov1, L. Shulga2
1International HIV/AIDS Alliance in Ukraine, Kyiv, Ukraine
2International HIV/AIDS Alliance in Ukraine, Kyiv, Ukraine

Issues: Ukraine has most severe AIDS epidemic in the region of Europe and Central Asia with estimated prevalence of 1.6%. Since 1997 the HIV epidemic in Ukraine has been driven by injecting drug users (IDUs). HIV prevalence in this group varies from 18.0% to 62.8%. In 2007 40% of all registered HIV cases were among IDUs. Existing public health system has almost no access to this group to prevent HIV transmission through targeted interventions.

Presenting author email: skate071@uottawa.ca
Prevention for male and female sex workers

WEPE0290 - WEPE0300

WEPE0290

Determinants of condom use among female sex workers in a high HIV prevalence town of Western Kenya

H. Vandenhoedt1, J. Menten1, L. Langat1, F. Odongo1, A. Anapapa1, T. Cruciat2, S. Oswoa3, C. Zett1, J. Vuelve4, K. Lasserose5, A. Budev6

1Institute of Tropical Medicine, Antwerp, Belgium, 2Institute of Tropical Medicine, Kisumu, Kenya, 3Kenya Medical Research Institute, Kisumu, Kenya, 4Centers for Disease Control and Prevention (CDC), Kisumu, Kenya

Background: In 1997, a survey among female sex workers (FSW) in Kisumu found a high prevalence of 75% and low reported condom use (50%) with the last client). Another survey was conducted in 2008, after setting up an intervention targeting FSW in Kisumu in 2006. The intervention consisted of free clinic services and an outreach programme. Here we report on condom use patterns of FSW and its determinants.

Methods: FSW over age 15 years were recruited in the community through respondent driven sampling. Written consent was obtained at the clinic prior to a behavioral computer-assisted self interview. FSW underwent a clinical examination and specimens were taken and tested for HIV and other STIs.

Results: 481 FSW were interviewed and 479 were tested for HIV and STIs. HIV prevalence was 58%, reported condom use 75%. In multivariate analysis adjusted for age, sex above 29 years (aOR: 2.5 [1.1-5.9]), and previously been tested for HIV (aOR: 2.3 [1.4-3.7]) were independent predictors of higher condom use.

Conclusions: The prevention program demonstrates effectiveness. HIV prevalence is stable; prevalence of unsafe sex behavior was decreased. These programs should be continued with strengthening of NGOs activities through outreach work, development of SWs' volunteer network and expansion of services focused on VCT, STI treatment, self sexual behavior skills.

Presenting author email: hvandenhoedt@itgb.ee

WEPE0291

Using "flower magazine" to reach sex workers with HIV prevention and education - experiences from China

T. Shen

DongJing Center for Human Rights Education and Action, Sex Worker Project, Beijing, China

Issues: As in other countries, widespread discrimination and stigma drive sex workers underground in China. Sex workers working in establishments such as massage parlors, hair salons and karaoke bars are difficult to reach, and very few Chinese HIV/AIDS organizations include them in their programs. Therefore, sex workers in China often lack access to HIV/AIDS-related information and services.

Description: Designed for sex workers, Flower Magazine provides regular information and services on HIV testing, as well as lessons on self-defense and fashion advice. This magazine is distributed for free to sex workers at their workplaces by staff and volunteers, with follow-up visits to get feedback. Our research efforts are combined with distribution of free condoms, free legal advice, and referrals to HIV testing.

Lessons learned: By personally distributing the magazines and conducting follow-up visits, we are able to build relationships with sex workers and identify their needs. An attractively-designed magazine has proven to be an effective tool to reach sex workers who read the magazine prefer a combination of fashion and entertainment information together with information on HIV/AIDS and STD prevention. We have also found it important to consult with sex workers on magazine content and approach, thereby building communal trust between sex workers and government organizations (NGOs). In 2007-2009 harm reduction services were integrated in all projects with the Global Fund support International HIV/AIDS Alliance in Ukraine scaled up basic harm reduction services among in- dependently working sex workers. All services were offered by NGOs. In 2007-2009 basic harm reduction services were integrated in all projects with the Global Fund support International HIV/AIDS Alliance in Ukraine scaled up basic harm reduction services among independently working sex workers.

Next steps: Future plan will include sex workers editors for the magazine, and also a peer control group who will set their own views and experiences. Future issue of Flower will place a strong emphasis on empowerment by providing basic human rights information and connecting readers with existing organizations and service providers. This will enable sex workers to join the growing network of sex work organizations in China, and assist them to access key services.

Presenting author email: tingting.shen007@gmail.com

WEPE0292

Review of HIV prevention and risk factors associated with HIV infection among sex workers in Uzbekistan

S. Koilemasova

Tashkent Regional Center to Fight AIDS, Tashkent, Uzbekistan

Background: Because of the increasing rate of heterosexual transmission of HIV infection - sex workers (SWs) remain one of the most vulnerable groups for HIV infection. The access of SWs to prevention services is provided through outreach workers of non-governmental organizations (NGO). Medical services are provided through health care facilities.

Methods: Reports have been collected from the NGO. HSS was conducted among SWs in 2005 and 2007. Cluster sample was used for SWs recruiting. Behavioral information and serological data were collected. Capillary blood spots were tested for HIV.

Results: In 2008 the SWs coverage by HIV services reached approximately 5000. Package of provided prevention services included: counseling, distribution of information and educational materials, counseling and testing (VCT), counseling and testing (VCT), FSW underwent a clinical examination and specimens were taken and tested for HIV.

Conclusions: The prevention program demonstrates effectiveness. HIV prevalence is stable; prevalence of unsafe sex behavior was decreased. These programs should be continued with strengthening of NGOs activities through outreach work, development of SWs' volunteer network and expansion of services focused on VCT, STI treatment, self sexual behavior skills.

Presenting author email: skoilemasova@mail.ru

WEPE0293

The efficacy of a peer-assisted multi-component behavioral intervention among female entertainment workers in China: an initial assessment

X. Yang1, G. Xian2, X. Li3, C. Laskin4, D. Celentano5, J. Wang1

1Old Dominion University, Sociology and Criminal Justice, Norfolk, United States, 2Shanghai Academy of Social Sciences, Shanghai, China, 3Harvard School of Public Health, Boston, United States, 4Texas Children’s Hospital, Houston, United States, 5Office of National AIDS Policy, Washington, United States

Background: Female entertainment workers in China are at high risk of HIV. Effective interventions are urgently needed. We hypothesize that effective intervention needs to go beyond information to also address motivations, behavioral skills, and social influences of behavior change.

Methods: This study is a cluster randomized controlled trial of HIV behavioral intervention among women working in entertainment establishments in Shanghai, China. The intervention is a small group, peer-assisted intervention that combines informational education with motivation enhancing, skills building, and social influences of behavior change. The control is an attention-controlled HIV health education. Both conditions are delivered on-site; all participants are offered free consultation and risk reduction resources through a study clinic/center. This initial assessment compares two-sample comparisons in unsafe sex between the conditions at 3-month post-intervention as well as in changes in measures targeted for intervention by intervention conditions.

Results: Participants in the intervention were significantly more likely than participants in the control to have used a condom in all last three sexual intercourses at the baseline (76.8% vs. 49.2%) and the 3-month post-intervention assessment (85.8% vs. 68.5%). Reduction in unsafe sex was less significant for the intervention (9 percentage points) than the control group (19.3 points). Both groups improved significantly in measures of motivation, self-efficacy, and social influences. Participants in the intervention reported more improvement in measures of social influences; participants in the control experienced comparable improvement in measures of prevention motivation and self-efficacy.

Conclusions: The intervention was effective in reducing unsafe sex and improving measures hypothesized to be associated with risk sex. The overall all efficacy (over the control condition) in reducing unsafe sex could not be established at the 3-month post-intervention assessment. Potential design factors that may have diluted the effects of the intervention are discussed. The intervention’s longer term efficacy will be evaluated when continuing follow-up assessment data become available.

Presenting author email: xyang@odu.edu
**WEPE0294**

HIV testing at the community level: a strategy to increase access to testing and subsequent utilization of HIV services by bar girls, female sex workers and other vulnerable groups

D. Abraham, Dazillia Rodrigues, Juliet Donz
Center for Development Initiatives, Mumbai, India

**Issues:** Availability of HIV Testing facilities as part of HIV programs need not result in their optimum utilization by the community. Absence of appropriate strategies that matches the needs of the communities, affects the utilization of services by bar girls, female sex workers and other vulnerable groups.

**Description:** Center for Development Initiative’s (CDI) aastha project works with female sex workers, bar girls and other vulnerable groups in Thane district of Maharashtra, India since 2005. HIV Counselling and Testing was integrated to the overall services of the organization in April 2009, under Public-Private Partnership of the State level HIV program. Of the total 1590 bar girls, female sex workers and other vulnerable groups presently active, only 334 beneficiaries tested for HIV in 8 month period up to November. Considering the difficulty of beneficiaries coming to the static clinic, HIV testing was promoted through a special campaign targeting work places and residential sites like brothels, bars, beauty parlors, lodges, slums and buildings. Multiple camps were organized throughout the city covering maximum coverage of community members in those sites. In the two months of campaign, another 478 beneficiaries were tested for HIV taking the total HIV tests to 812 at the end of January 2010.

**Lessons learned:** Low utilization of HIV testing services by vulnerable groups, inspite of its availability have number of reasons such as location of testing facility, family and social commitments, a previous HIV negative result, Personal fears and concerns, lack of support from regular partners and stakeholders, environmental factors and nature of their work and timings. Various obstacles in utilization of services can be overcome through appropriate community level programs.

**Next steps:** Understand the community needs to increase the coverage of HIV testing facilities, sustaining the motivation for routine HIV testing and effectively linking PLHAs to various services.

Presenting author email: annajoy@vsnl.com

---

**WEPE0295**

100% life! Integrating sexual and reproductive health into HIV prevention programs for female sex workers in Mozambique

A. Zandamela1, B. Maia1, D. Nandoja2, M. Benedetti3, V. Rufino1, V. Pedro3, D. van der Syl
1Pathfinder International, Maputo, Mozambique, 2Maputo Health Provincial Directorate, Maputo, Mozambique, 3UNFPA, Maputo, Mozambique, 4PSI, Maputo, Mozambique, 5Mozambique, Maputo, Mozambique

**Issues:** Mozambican Provincial Health Directorates partner with Pathfinder/UNFPA/PSI to develop the “100% Vita” project in 5 provinces to provide HIV prevention messages, male/female condoms and HIV services for female sex workers and their partners through peer educators, night clinics, condom/lubricant distribution/distribution. Clinical services provide VCT and STI diagnoses/treatment. HIV testing services also revealed increased demand for family planning (FP) and sexual and reproductive health (SRH) services, specifically FP services and products (pills, injectables and IUDs), and counseling on dual-protection, post-abortion and antenatal care.

**Description:** Partners developed a strategy to integrate FP/SRH into HIV services whereby FP/SRH themes are included in the training curricula of peer-educators (PE) and health providers. A specialist on FP/SRH was incorporated into the health providers’ team. Specific flows for health care were developed and monitoring instruments were adapted.

**Lessons learned:** Stigmatized groups like FSW need tailored programs to access health, especially in generalized epidemics. Comprehensive, integrated health services are essential to HIV prevention. Education on HIV/SRH and the importance of FP must be reinforced in all program activities. Switching the focus from behavior change to health promotion through integral women’s health care is a way of improving adherence to FSW health service utilization (including ART for HIV+ FSW) and to HIV prevention activities.

**Next steps:** Scale-up integrated services to all sites; strengthen linkage between providers’ in order to maximize demand for services; prioritize long-lasting FP methods; integrate post-exposure prophylaxis services; etc. Strengthen capacities among National Health System to offer specific care for FSW.

Presenting author email: azandamela@pathfund.org

---

**WEPE0296**

The effectiveness of a peer-based mobile outreach program in reaching high-risk female sex trade workers who use drugs in a Canadian setting and elevating access to injurious treatment services

K. M. Deering1, M. W. Tyndall2, T. Kerr3, K. Gibson4, L. Iorns5, J. Montaner1, K. Shannon1
1University of British Columbia, School of Population and Public Health, Vancouver, Canada, 2ICRC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 3Faculty of Medicine, University of British Columbia, Vancouver, Canada, 4Women’s Information and Safe Haven (WISH) Drop-In Centre Society, Vancouver, Canada

**Background:** For female sex workers (FSW) who use drugs, peer-based outreach services by community organizations are frequently their only point of contact with health services. In this study we examined the determinants of using a mobile outreach program (the Mobile Access Project [MAP]) among street-based FSWs at high risk for HIV in Vancouver, Canada and evaluated the relationship between program exposure and accessing addiction treatment services.

**Methods:** A detailed questionnaire administered at baseline and bi-annual follow-up visits over 18 months (2006-2008) elicited information on demographics, working conditions, violence/safety, sexual/drug-related harms, incident and outpatient addiction service access and MAP use in a study sample of 242 FSWs. MAP has operated since 2005, distributing HIV and blood-borne infections prevention resources (e.g. condoms, needles), collecting reports of client violence and providing a primary contact for peer interaction and referral to health/social support and drug treatment services.

**Results:** The median age of the sample was 36, with 50.8% self-identifying as Aboriginal and 25% HIV-positive. Over 18 months, 42.2% (202) reports of mobile outreach program use were recorded. The program clearly reached higher-risk street-based FSWs; those who serviced a higher weekly volume of clients (10+) and solicited clients in isolated settings both had 1.7-fold (p<0.05) higher odds of accessing the program. In total, 9.4% (45) reports of accessing inpatient addiction treatment services were made (7.5% detoxification; 4.9% residential drug treatment), and 33.6% (161) accessing outpatient treatment (28.8% methadone; 9.6% alcohol/drug counselor). Notably, program exposure remained independently correlated with accessing inpatient addiction treatment, with 4-fold elevated odds (p< 0.001), even after adjusting for drug use, environmental-structural factors, and outpatient treatment.

**Conclusions:** Our findings demonstrate that peer-led mobile outreach and violence are more likely to access this peer-led mobile outreach program and suggest that the program plays a critical role in facilitating access to detoxification and residential drug treatment.

Presenting author email: kdeering@interchange.ubc.ca

---

**WEPE0297**

The impact of intervention programs for sex work on social changes - experiences from Serbia

D. Jirić1, M. Ridder2, S. Piecas2, M. van der Velden2, E. Drapej2
1Association against AIDS - JAZAS, Belgrade, Serbia, 2SAOAIDS, Amsterdam, Netherlands, 3Soa Aids Nederland - Aidsfonds, Amsterdam, Netherlands

**Issues:** We present a case study of the NGO JAZAS in Serbia in partnership with SOAIDS Netherlands, and its implementation of two projects (POWER of Prevention and A Step Ahead) The projects entails a comprehensive approach on HIV, Human Rights and Sex Work in Serbia.

**Description:** In an environment of repressive legislative measures and high levels of discrimination and stigma faced by FSW in Serbia, NGO JAZAS instigated a comprehensive prevention programme. The prevention programme was targeted at sex workers as they who are marginalized and completely ignored by civil society and institutions.

The main activities are:
- education of police, health care workers, social workers, sex workers, volunteers and other non-governmental organizations who work with HIV vulnerable populations.
- outreach work; is supported by mobile medical units & drop-in centre - lobbying and advocacy: the academic community (Serbian Academy of Science and Arts), local government, parliament, ministry of Health, Ministry of Social Welfare, the association of prosecutors and the Ministry of Justice.
- public exposure: media coverage and collaboration, conferences, publications.

**Lessons learned:** HIV prevention is not merely the distribution of condoms, but rather, it entails a broad spectrum of human rights. It entails the right to non-violence targeted at sex workers, the right to make informed choices and to control the risks of one’s own health.

The innovations which these projects brought to Serbia were expanded throughout the country with focus on education of medical staff, police officers, social work and other government officials.

One of the most significant outcomes of SOAIDS projects is the recognition of supporting sex work projects by the Ministry of Social Welfare. The recognition of a government body has great effect on the sustainability of such projects.

**Next steps:** Linking best practices in other Eastern and Central Europe countries with a similar context.

Presenting author email: drijic@sezampro.rs

---
WEPE0298
Evaluating a program of condom use among female sex workers (FSW) in Dominican Republic, 2006–2008

B. Nieto-Andrade1, J. Hasdün2, K. Colón3, C. Szymanski4, G. Agudelo5


Background: In the Dominican Republic, PSI is part of a collaborative HIV-program targeting FSW, one of the most at risk populations, with an HIV-prevalence of 3.0% (SESPAS, 2007). The program consists of interpersonal communication developed by government and partner NGOs, as well as general mass-media developed by PSI.

Methods: To evaluate the impact of this program on FSW’s sexual behavior, two cross-sectional surveys were conducted among FSWs, using time-location sampling, in 2006 (n=715) and 2008 (n=789). Surveys collected information on sexual behaviors, determinants of condom use, exposure to communication programs and controlling for demographic factors. Univariate analysis was conducted to check for changes over time and impact. Values are reported using mean scores (likert scales ranging from 1=totally disagree to 4=totally agree) or percentages.

Results: Condom use at last sex with a client kept stable above 95% in 2006–2008. While non-commercial partners it increased from 57.2% to 84.2% (p<0.01), the increase can not be attributed to the program. In 2008 levels of condom use were significantly higher than in 2006 among FSW both exposed and unexposed. Nevertheless, the program demonstrated impact on FSW’s intention to use condoms with all their partners (mean value changed from 3.62 to 3.79, p<0.01), perceived negotiation skills to wear condom with regular clients (3.07 to 3.45, p<0.01); belief that having sex without condoms is not good (2.38 to 2.66, p<0.01); having condoms at home (3.27 to 3.77, p<0.01); and knowledge that HIV is not transmitted through mosquito bite (53.5% to 60.8%, p<0.05).

Conclusions: Over time, the members experienced gradual different stages of the project life could make difference in HIV prevention. DNS expanded strategic partnership with other two local SHGs ULKA and AKASH. DNS handed over its FSW project to another partner with Shourav and Narimultii Sangha is under process. Lessons learned: HIV prevention effort by SHG breeds ownership, commitment needed for sustaining interventions with long term vision. Community involvement also nurtures project staff transformation that augments the HIV work with humane approach.

Next steps: As community will be in face of hope irrespective of continuation of the fund, similar initiatives of taking local SHG/ CBO as partners can be replicable for other HIV donors for effective and sustainable programming at scale. Presenting author email: mamin@emailchildren.org

WEPE0299
Cognitive, affective, and contextual factors in association with unprotected anal intercourse among Chinese male sex workers


1The Chinese University of Hong Kong, Hong Kong, China, 2Center for Disease Control and Prevention, Shenzhen, China, 3Sun Yat-sen University, Guangzhou, China

Background: Worldwide, the prevalence of HIV has been increasing among men who have sex with men (MSM). Male sex workers (Money Boys or MBs) serving men are at particularly high risk for HIV infection. However, relatively few studies have been conducted among this vulnerable group.

Methods: A cross-sectional anonymous survey was conducted. In total, 186 MBs in Shenzhen, China serving cross-border Hong Kong male clients were interviewed by peer workers.

Results: Of all respondents, 49.5% had engaged in unprotected anal intercourse (UAI) with Hong Kong male clients in the last 6 months and 24.2% anticipated they would do so in the next 6 months. Stepwise logistic regression analyses found that perceived efficacy of condom use for HIV prevention, partners’ ability to convince Hong Kong male clients to use condoms during anal sex, and perceived prevalence of HIV among Hong Kong MSM were associated with UAI. However, when controlling for Hong Kong male clients OR=0.02 to 0.09; the reverse was found for those who always left decisions of condom use to Hong Kong male clients (OR=6.44). Perceived condom efficacy, self-efficacy in protecting oneself from contracting HIV and perceived control over condom use were associated with intention of UAI (OR=0.06 to 0.84). Adjusted for background variables, the four scales assessing impact and exposure to decisions on UAI with male users (Clients Characteristics, Fear of Dis-eases, Substance Use or Environental Influences) were significantly associated with UAI (adjusted OR=0.44 to 32.61). All but one (Fear of Diseases) scales were associated with intention of UAI (adjusted OR=4.59 to 43.32).

Conclusion: MBs are at high risk of HIV acquisition and transmission. A wide range of cognitive, affective, and contextual factors are associated with UAI with male users and need to be taken into account for HIV prevention.

Presenting author email: gujing0828@hotmail.com

WEPE0300
Self help group of sex workers, a partner in national response for HIV prevention in Bangladesh


1Save the Children USA, Bangladesh Country Office, HIV/AIDS Sector, Dhaka, Bangladesh, 2Department of Dermatology, Dhaka Medical College Hospital, Dhaka, Bangladesh, 3Vice President, Dhaka, Bangladesh

Description: As a partner Self help group (SHG) generates broader scope to conduct HIV and STI prevention services. However, by providing targeted services within FSW communities, it is possible to decrease stigma and ensure this group gains greater access to HIV & STI prevention services.

Conclusions: Effective strategies can ensure increased access to HIV and STI services among vulnerable hard-to-reach groups.

WEPE0301
Promoting access to HIV and STI prevention among female sex workers on Bonny Island, Nigeria

Y. Chi1, A. Odeh2, D. Mwanmuth1, N. Arvanitidis1

1Ibani-se HIV/AIDS Initiative, Bonny, Nigeria, 2Nigeria Liquefied Natural Gas Company Ltd, Community Relations and Development, Bonny, Nigeria, 3Shell Upstream Nigeria Limited, Bonny, Nigeria

Background: In 2006 Bonny Island provided a community-based organization on Bonny Island, Nigeria since 2007 has carried out activities to prevent HIV and STI transmission and improve access to services for FSWs. The strategy was to integrate HIV and STI education and counseling, skills training such as condom negotiation and use, assertiveness, conflict resolution and money management; and training of FSWs and their clients as Peer Educators. Two mini clinics were established in major FSW neighborhoods where information on HIV and STI prevention, counseling and testing and syndemic management of STI services could be provided informally through trained non-medical staff.

Presenting author email: chidli.ibba@nig.com

WEPE0302
Utilization of STI/HIV services of female sex workers after the government reform in Thailand

T. Sirapongsasri1, P. Guest2, S. Janyam3, A. Prohmno2

1United Nations Population Fund, Country Office, Bangkok, Thailand, 2Institute of Population and Social Research, Bangjak, Thailand, 3Service Workers in Group Foundation, Bangkok, Thailand

Background: Thailand has introduced the universal health care scheme and transferred management of STI clinic from the provincial health offices to hos-pitals in 2003. Difficult access to STI/HIV services has been a major concern particularly among marginalized population including sex workers. We con-ducted a study in female sex workers (FSW) to determine coverage and as-sociated factors to utilization of STI/HIV services.

Methods: The survey was done in four cities in Thailand, Pattaya, Bangkok, Pattaya, Songkla and Chiangmai in 2007. The five common types of establishments and free-lance work were included in a sampling frame. Samples of establishments were randomly selected. All women appeared to working at selected sites were approached and asked for verbal consent. Face to face interview with structured questionnaire was done by trained interviewers.

Results: 813 female sex workers were included with the average age of 28 years, 94.7% were Thai and 22.5% had no any health insurance. The median age when that women had been working in sex trade was 2 years. 67.1% had ever received STI services while 50.3 and 60.1% received it in the last 6 and 12 months respectively. 56.8 and 68.8% were tested for HIV in the last 6 and 12 months respectively. Sex workers in karaoke (52.1%), beer bar (54.3%), and freelance work (43.3%) had received STI services less than those in ago bars (80.3%), brothels (81.1%), and massage parlors (94.9%). FSW aged < 20 years was less likely to receive STI services (43.7% vs 70%). Those who...
WEPE0305
Evaluating a service package for management of symptomatic and asymptomatic STIs among female sex workers (FSWs) in India
D. Leharan1, A. Das1, P. Narayanani, G. Neilsen
1Family Health International/India, STI Capacity Raising, New Delhi, India, 2National AIDS Research Institute (ICMR), Pune, India

Background:
The Avahan program supported by the Bill & Melinda Gates Foundation provides HIV prevention services to 200,000 female sex workers (FSWs) in six states in India. The essential STI service package (ESP) comprises syndromic management of symptomatic infections; presumptive treatment for asymptomatic infections and regular clinical and syphilis screening. In 2008-9, an operations research was conducted with a cohort of FSWs to evaluate the effectiveness of the ESP.

Methods:422 participants were recruited from three FSW clinics at two cities, Mumbai and Hyderabad, and followed up periodically for six months. A questionnaire was administered, clinical examination performed and laboratory samples collected. Vaginal swabs were tested for Neisseria gonorrhoeae (NG), Chlamydia trachomatis (CT), Trichomonas vaginalis (TV), bacterial vaginosis (BV) and yeast infection. Blood was tested for syphilis serology. Genital ulcer swabs were tested for Treporema pallidum (TP), Haemophilus ducreyi (HD) and HSV-2 using multiplex polymerase chain reaction kits. Study interventions included syndromic management of symptomatic STIs and a single presumptive treatment dose for NG and CT at the baseline visit.

Results:Baseline findings showed that 25% FSWs had NG/CT infection, of which 89% had related symptoms/signs while 17% were asymptomatic. One in four individuals complaining of vaginal discharge had NG/CT. Syphilis seropositivity was 10%. The median number of commercial partners in the last week was four while 65% had regular partner/s. Consistent condom use with commercial and regular partners was 70% and 18% respectively.

Conclusions:Presumptive treatment for NG and CT for female sex workers in India may not be optimal and periodic presumptive screening seems justified given high prevalence among asymptomatics. FSWs with vaginal discharge should be treated for both vaginal and cervical infections. The periodicity of presumptive treatment and STI screening will be determined by the STI incidence in the cohort. Risk-reduction measures and regular partner treatment should be re-emphasized in health education sessions.

Presenting author email: drdasly@gmail.com

WEPE0303
Changing scenario of commercial sex work in Kerala, India and its implications for strategy development
V. Raji1, T.O. Lukka2, D. Joseph3, M.P. Kumar4, K.B. Sudheer
1Technical Support Unit for Kerala State AIDS Control Society, Trivandum, India, 2Kerala State AIDS Control Society, Trivandum, India

Background:
Many aspects of commercial sex work change over time as a result of changes in the social milieu and to cater to shifting client preferences. Patterns of change need to be understood for designing suitable interventions. Kerala being a state where female sex workers have been in place in the south Indian state of Kerala for more than 10years. This study was done among Female Sex Workers to understand the shift in the commercial sex work scenario over the last decade for strategy development.

Methods:
The methodology was a survey methodology, in-depth interviews and focus discussions. 250 FSWs were selected according to stratified simple random sampling design from 7 projects which gave a geographical coverage of the state.

Results:
Soliciting in the street has come down to 44% from 56% 60% FSWs own houses are being used increasingly (from 24.8% to 59.19%) for sexual encounters. Patterns of change need to be understood for designing suitable interventions. HIV prevention interventions targeting female sex workers have been in place in the south Indian state of Kerala for more than 10years. This study was done among Female Sex Workers to understand the shift in the commercial sex work scenario over the last decade for strategy development.

Conclusions:
Need to be intervened. Condoms for oral and anal sex, lubes etc should be provided as part of the intervention among FSWs. Alcohol use needs to be intervened. Communication strategies may be used which take advantage of the auto drivers, lodge boys, head load workers, who are expected to take a receptive, insertive or versatile sexual identity.

Presenting author email: svimalravi@gmail.com

WEPE0304
HIV knowledge and attitudes among female entertainment workers (FEWs) in Shanghai, China
Q. Pan1, L. Kang1, B.S. Ramesh2, L. Calzavara3, T. Myers4, J. Liu5, X. Tang6, J. Pan1, X. Liao1, X. Tian1, H. Pan1, Y. Ni1
1Shanghai Center for Disease Control and Prevention, Shanghai, China, 2University of Toronto, Dalla Lana School of Public Health, Toronto, Canada, 3Sidaction, France, 4WHO, Geneva, Switzerland, 5China CDC, Shanghai, China, 6Jiangsu CDC, Shanghai, China, 7Kaoshan CDC, Shanghai, China, 8Shanghai CDC, Shanghai, China, 9Mehong CDC, Shanghai, China, 10Luwu CDC, Shanghai, China, 11Changning CDC, Shanghai, China

Background:
To examine HIV and STI risk perception, HIV knowledge and stigma among FEWs in Shanghai, China.

Methods:
We conducted a cross-sectional survey among 750 FEWs aged 16-46 years from six districts in Shanghai in May to June 2009. Data on demographic characteristics, HIV and STI risk perception, HIV knowledge and appropriate clinical examination. STI/HIV prevention programs need to be re-emphasized in health education sessions.

Presenting author email: svimalravi@gmail.com

WEPE0306
Self reported identity and risk behaviors in men having sex with men (MSM) in India: implications for STI/HIV management
P.N. Vasudevan Potty1, A. Das1, P. Prabhakar1, A. Rishib2, R. Gangakheekar3
1Family Health International, STI Capacity Raising, New Delhi, India, 2National AIDS Research Institute (ICMR), Pune, India, 3National AIDS Research Institute (ICMR), Pune, India

Background:
MSM in India identify themselves as kothi, panwi, or double-decker, who are expected to take a receptive, insertive or versatile sexual role, respectively. This classification generally used by health care providers as the basis for management of sexually transmitted infection (STI) may not always reflect their sexual practice and related risks, leading to inappropriate management. For sake of clarity this study attempts to describe receptive, insertive and versatile role of the MSM.

Methods:
In 2008 and 2009, all MSM in India (182) attending four NGO-operated clinics in two cities of India - Hyderabad and Mumbai - were recruited in a survey regardless of their motives for seeking consultation. Participants provided information on their sexual behaviors and STI-related treatment seeking behaviors. Biological specimens were collected by a physician.

Results:
Participants included: 59% “receptors”, 8% “penetrators”, and 33% “versatile”. In the last three months, receptive anal sex was reported by 97% of “receptors”, 20% of “penetrators” and 91% of “versatile”. Concord use at last receptive anal sex was reported by 94% of “receptors”, 86% of “penetrators” and 79% of “versatile”. Penetrative anal sex irrespective of partner’s gender was reported by 18% of “receptors”, all “penetrators” and 73% “versatile”. Irrespective of MSM sexual identity, the prevalence of Neisseria gonorrhoeae (NG) and/or Chlamydia trachomatis (CT) (NG/CT) was 15% for rectal and 2% for urethral infections. Rectal NG/CT prevalence was 10% among “receptors”, 20% among “penetrators” and 15% among “versatile”. Urethral infection was detected among 2% “receptors”.

Conclusions:
The study confirms that self-reported sexual identity does not reflect sexual behavior of MSM in India. Current behavioral assessment tools and appropriate clinical examination. STI/HIV prevention programs need to focus on risk reduction for MSM, irrespective of their sexual identity.

Presenting author email: pprabhakar@hindu.org

WEPE0307
Prevention for men who have sex with men (MSM)
WEPE0306-WEPE0345

Presenting author email: sitaprapsiri@unfpa.org
WEPE0307
Building a dialogue: seminar on work with MSM in prison settings
L. Kononenko1, G. Chupryan2, K. Kliendera
1Penitentiary Initiative, Nikolaev, Ukraine, 2amfAR, The Foundation for AIDS Research. New York, United States

Issues: There is an urgent, yet underaddressed, need for HIV prevention and treatment services (including psychosocial support) for MSM prisoners in Ukraine. Recent census data revealed high prevalence of interventions for this vulnerable group, with few governments and NGOs engaged in meeting their needs.

Description: Based on a pilot project, in August 2009 Penitentiary Initiative NGO conducted a first ever two-day national seminar for health workers focused on MSM/MMS+ in prisons (held in Koblevo, Ukraine). With support from amfAR’s MSM Initiative, participants representing penitentiary officials, prison psychologists, NGO health professionals, as well as ex-prisoners and LGBT leaders, were able to identify effective strategies to address this situation. Discussion topics included: sexuality/salubrity/identity/salubrity-based discrimination; stereotypes of MSM (including differences between MSM behavior in the general population and in the prison population); inherent HIV risks among MSM in prison settings; strategies for working with MSM/MMS+ in prison settings; needs assessment of the target group (their social situation, awareness of HIV/STIs, sexual practices, access to condoms and lubricants, and needs for psychological support). Penitentiary Initiative NGO and the Mangost Foundation shared their experience running support groups for MSM/MMS+ inmates.

Lessons learned: ‘Insider’ information and insights of ex-prisoners and prison psychologists brought special value to the seminar. Participant feedback gave especially high ratings to the topics ‘basics of sexuality’ (in particular, differences between sexual orientation and sexual behaviors) and ‘stereotypes of MSM’. In general, the seminar highlighted the following strategies targeting incarcerated MSM: running groups of psychological support and training peers for education and distribution of condoms, lubricants, supplies, and non-judgmental hygiene and informational materials.

Next steps: Findings were integrated into the Penitentiary Initiative NGO’s prison health education follow-up being conducted with participants to assess progress. Seminar 2010 on building tolerance towards MSM/MMS+ inmates. The goal for this seminar is even wider geographic representation.

Presenting author email: lina-blago@ukr.net

WEPE0308
Community-based rapid HIV testing for MSM (men who have sex with men) in Nagoya, Japan: comparison of MSM attending a MSM targeted health center HIV testing with those attending a gay festival
A. Shingae1, N. Kaneko1, S. Shiono1, M. Utsumi2, S. Ichikawa2
1Nagoya City University School of Nursing, Nursing, Nagoya, Japan, 2Japan Foundation for AIDS Research, Tokyo, Japan, 3National Hospital Organization Higashi Nagoya National Hospital, Nagoya, Japan

Background: Despite the availability of free and anonymous HIV testing, gay and bisexual men experience prejudiced treatment at community health centers in Japan. Gay NGOs, medical staff, local governments health officials and researchers collaborated to provide targeted HIV testing events for MSM (M=117, S=82) who have sex with men in Nagoya. Rapid HIV testing events for MSM were held twice a year at a health center after office hours (September and December 2009).

Methods: HIV test examinees at health center event were compared with those who had been to a gay festival, NLGR 2009, which aimed to promote HIV awareness for sexual minorities, held in a central park in Nagoya in June 2009. Voluntary self-administered questionnaires collected demographics, risk behaviors, and exposure to HIV information to identify the differences between those two groups (health center n=153; NLGR2009 n=303).

Results: Health center respondents were more likely to be older (p<0.001), to state bisexual identity (p=0.001), and reported higher rates of HIV testing in life time (p=0.001) than those participating in the gay festival. Health center respondents were also less likely to have accessed prevention materials, such as a community center (p=0.006 and community paper) (p=0.001), and to go to gay bars (p=0.03) or night clubs (p=0.014) than the gay festival participants.

Conclusions: The after-hours health center HIV testing event attracted MSM who were less likely to be involved in gay communities. Nagoya city will continue to offer HIV testing events for MSM twice a year and rapid HIV testing alternate Saturday evenings to improve HIV testing accessibility. It is also necessary to promote targeted gay-friendly HIV testing for MSM.

Presenting author email: shinok@med.nagoya-cu.ac.jp

WEPE0309
Creating catalysts for positive social change: using an innovative peer education model to work with young Black African, Black Caribbean and Black British MSM on sexual health in London, United Kingdom
D. Ugo1, M. Agbata2, A. Awimbaby3, R. Ghose4
1PSI Project London, London, United Kingdom

Issues: Young Black Men who have sex with Men (MSM) in the United Kingdom are disproportionately impacted by HIV and there is a lack of prevention programs specifically tailored towards this population.

Description: The Catalyst Project is a peer education program which focuses on developing young Black MSM (Aged 18-30) into sexual health peer leaders for their community. Peer leaders undergo an accredited training program to raise their awareness on a range of topics including the holistic nature of sexual health; cultural, social, and identity issues affecting Black MSM; and community specific and sexual identity issues affecting their community. After completing the training program, peer leaders carry out a community engagement project in which they partner with leading voluntary and community organizations in London to deliver messages and support other young Black MSM. With the support of HIV, sexual health, personal development and social needs in a number of creative ways.

Lessons learned: Through the program, peer leaders gained knowledge and skills about HIV and sexual health issues as well as social, cultural and identity issues that influence the sexual health of young Black MSM. Moreover, peer leaders utilized innovative modes of communication such as new media and creative arts to lead interventions that supported and delivered sexual health, anti-stigma and same sex affirming messages to their peers. This has improved the reach, accessibility and quality of engagement of young Black MSM to sexual health issues and services. As a result, young Black MSM in the community are more empowered to make healthy sexual choices and have increased access to sexual health services.

Next steps: Through the successful implementation of programs such as the Catalyst Project, peer educators will gain valuable knowledge, skills, and accredited training which will enable them to lead interventions that provide culturally competent information and support to marginalized individuals with respect to sexual health.

Presenting author email: muda@naz.org.uk

WEPE0310
Romania’s first HIV-positive men who have sex with men (MSM) peer support network
T. Kovacs, T. Ban
PSI Romania, Programs, Bucharest, Romania

Issues: HIV stigma within the MSM community has a negative effect on access to services and social support among both HIV negative and positive MSM. HIV+ MSM become isolated and engage in avoidant coping strategies and sexual risk taking. The reluctance to disclose one’s status and the lack of visible HIV+ MSM often causes unaffected MSM to deny their susceptibility, refuse HIV testing and engage in risky sexual behaviors while at the same time isolating their positive peers.

Description: PSI started Romania’s first network of HIV+ MSM in 2008 through an anonymous email system. Membership has grown from 6 to 42 members. Participants share information about their daily lives (health, sex, and emotional life) and provide mutual psychosocial support through online chats and in-person, national meetings. The online section on the MSM program’s website and populates it with health and social science resources. In an effort to reduce stigma directed towards HIV+, PSI Romania recruited one member to facilitate talks among members of the gay community about living with HIV.

Lessons learned: Response from HIV+ MSM is positive as once they overcome their fear of their status being disclosed. Many said the network became their reason to continue living and the only space where they feel accepted by others and free to be themselves. The visibility of the network on the MSM website increases the awareness of HIV-associated issues among the broader MSM community.

Next steps: As the network continues to grow, it is important for its members to be empowered and to take ownership for its functionality so that it becomes self sustaining and independent. In order to continue reduce HIV stigma among MSM, the network will continue to sustain the MSM peer network and HIV+ MSM will therefore become increasingly visible among the broader MSM community.

Presenting author email: tkovacs@psi.ro

WEPE0311
Challenges and opportunities for behaviour change communication amongst young men (15 - 24 years) who have sex with men in Jamaica
M. Guttery1
1Jamaica Red Cross, HIV, St Catherine, Jamaica, 2University of the West Indies, CARIMAC, Mona, Jamaica

Background: Homophobia and heterosexism in Jamaica has severely hampered the execution of critical HIV prevention initiatives, as it perpetuates and sustains an invisible or camouflaged gay community driven underground, away from the access of social service providers. There also exists a dearth of research and social programmes executed with young gay men who are believed to be at increasingly high risk for HIV infection. This study creates a body of knowledge which social and health scientists may use to inform the creation and execution of crucial evidence based interventions for gay men.

Methods: Subsequent to an extensive literature review and research, a detailed inquiry was executed among a field of 130 young men aged 15 and 24 years old, who have sex with men in the Kingston Metropolitan area of Jamaica, through the use of survey questionnaires, in-depth interviews and a focus group discussion. Key programme professionals were also interviewed.

Results: The study found that the HIV prevalence rate among men who have sex with men was 15 times higher than the general population. Fifty percent (50%) of respondents had sex with 3-10 partners over the last 4 weeks. Seventy-five (75%) of these partners were more that 5 years their senior and 75% of the encounters were unprotected. Forty (40%) of the respondent were having sex with women, 34% of which were unprotected. or wey. Forty eight percent (48%) of the respondent did not think they were at risk for HIV.

Conclusions: The prevalence of homophobia and heterosexism has to be addressed at the political, legal and community levels, as it impedes
critical HIV prevention initiatives, particularly research and prevention pro-
grammes. If prevention amongst men who have sex with men is not given equal
attention during the general programme, it is likely to continue to increase.
Presenting author email: marvingunter@hotmail.com

WEPE0312
Vulnerability and risk for HIV among men who have sex with men in Maputo, Mozambique 2009
D. da Silva1, A. Barberio1, D. Benedito1, D. Joseph1, M. Chissano1, E. Gune1, F. Musa1, T. Wheeler1, D. Ngat2
1LABMEDA, Maputo, Mozambique, 2Pathfinder International, Maputo, Mozambique, 3Population Services International, Mozambique, Maputo, Mozambique, 4University of Eduardo Mondlane, Maputo, Mozambique, 5UNFPA, Maputo, Mozambique

Background: About 5% of new HIV infections in Mozambique occur between men who have sex with men (MSM) (UNAIDS-2009). However, no studies of risk behaviors have been conducted with MSM. MSM aren’t included in the HIV prevention strategy. We conducted a qualitative study in 2009 to understand risk behaviors among MSM in Maputo.

Methods: We trained 15 MSM peer researchers; each met 3 times with 2 interviewees each to complete 30 in-depth interviews on MSM risk behaviors. We also conducted an additional 15 semi-structured MSM interviews.

Results: Despite high levels of knowledge, men reported HIV inconsistent condom use due to trust in sex partners (‘attractive men don’t have AIDS!’), perception that one can tell if someone has HIV, and belief that only vaginal sex can transmit HIV. Other reported risk behaviors include transactional sex, sex with both men and women, group sex, and sex while intoxicated. Men reported high availability of condoms but not of water-based lubricants, and use non-water-based lubricants to facilitate penetration but not to prevent disease transmission. The access to, and knowledge of benefits of lubricant. Men reported discrimination from health workers when seeking HIV testing and treatment.

Conclusions: MSM in Maputo need targeted non-discriminatory interventions to reduce their risk for HIV, including: MSM-friendly health service providers, communication on the risk of unprotected sex and concurrent sexual partnerships; and, improved access to and messaging around water-based lubricants.

Presenting author email: mbenedetti@pathfinder.org

WEPE0313
Engaging the business sector across Europe in HIV prevention programs that target men who have sex with men (MSM)
L. McDonnell1, K. Shield2, B. Tunstall
1University of Brighton, International Health Development Research Centre, Brighton, United Kingdom, 2Terence Higgins Trust, Health Improvement, Brighton, United Kingdom

Issue: Men who have sex with men (MSM) are one of the key at-risk groups of HIV transmission in many countries of the European Union. ‘Gay tourism’ is a widespread phenomenon with the internet and cheaper travel facilitating increased opportunities for men to have sex with men.

Description: Co-funded by the European Commission, the Everywhere Project involves key partners from the UK, Italy, France, Poland, Cyprus, Spain, Slovenia, Spain and Hungary. The project aims to develop and validate a business sector engagement and culturally adapted European model of HIV prevention targeting MSM across Europe. This paper will report on the findings of 498 in-depth interviews conducted by social mediators with managers and owners of the business sector. The interviews focused on business sector attitudes to and ability to engage in HIV prevention amongst MSM.

Methods: In-depth interviews conducted by social mediators with managers and owners of the business sector. The interviews explored the business sector’s attitudes to and ability to engage in HIV prevention amongst MSM. The interviews were conducted with businesses across Europe.

Results: Despite high levels of knowledge, men reported HIV inconsistent condom use due to trust in sex partners (‘attractive men don’t have AIDS!’), perception that one can tell if someone has HIV, and belief that only vaginal sex can transmit HIV. Other reported risk behaviors include transactional sex, sex with both men and women, group sex, and sex while intoxicated. Men reported high availability of condoms but not of water-based lubricants, and use non-water-based lubricants to facilitate penetration but not to prevent disease transmission. The access to, and knowledge of benefits of lubricant. Men reported discrimination from health workers when seeking HIV testing and treatment.

Conclusions: MSM in Maputo need targeted non-discriminatory interventions to reduce their risk for HIV, including: MSM-friendly health service providers, communication on the risk of unprotected sex and concurrent sexual partnerships; and, improved access to and messaging around water-based lubricants.

Presenting author email: mbenedetti@pathfinder.org

WEPE0314
MSM project amongst refugees and supporting host community in Cox’s Bazaar, Bangladesh
Z. Jamali1, A. Burton1, Z. Sultana1
1UNHCR, Regional Office Head Office, Cox’s Bazaar, Bangladesh, 2UNHCR, Regional Office Head Office, HIV, Bangkok, Thailand, 3UNHCR, Reproductive Health, Cox’s Bazaar, Bangladesh

Issues: There are 28,029 registered Rohingya refugees residing in two camps in Cox’s Bazaar, Bangladesh. 28.7% of the population will be under the age of 15, with 38% of this age group potentially at risk of HIV infection. Over 20% of the refugees are MSM.

Description: An HIV prevention programme for MSM in refugee and surrounding communities began in 2009 and includes the following: 1. MSM and refugee peer educators provide information and facilitate access to HIV and sexually transmitted infections (STIs) prevention commodities and services including counseling and behavioural change; 2. Health promotion campaigns and appropriate referral; 2. Weekly support groups for both communities; 3. Referral in camps for HIV counseling and testing, STI management, counseling, partner tracing and treatment; 4. Provision of condoms and lubricants through peer educators, community health workers, STI clinics and HIV resources centres; 5. Gender and community awareness (e.g. street drama, folk songs and quizzes) with the aim of reducing HIV stigma and reaching MSM targeted by specific interventions. After the initial implementation, 79 MSM from both refugee and surrounding populations have been regularly accessing services; 9,600 condoms have been distributed to MSM compared with only 650 the previous year; 34 MSM received treatment for STIs and five have accessed voluntary counseling and testing services. This is a considerable improvement given the stigma associated with male to male sex in this particular setting.

Lessons learned: It is possible to reach MSM with HIV prevention services in refugee camp settings despite strong socio-cultural constraints. Specific services for MSM communities, including peer support, and a comprehensive package of HIV prevention services will facilitate access. In refugee settings, it is important to include MSM from surrounding host communities as their social networks interact.

Presenting author email: jamala@unihr.org

WEPE0316
Male sex workers who have sex with men (MSM-SW): marginalized and high risk population with poor access to STI/HTV health services in Nairobi, Kenya
G. Gakiria1, J. Kimani1, L. Gelmon2, P. Izuka2, S.S. Swop Clinic
1University of Nairobi/University of Manitoba, Nairobi, Kenya, 2HIV Center for Clinical and Behavioral Research, Universidad de Buenos Aires, Argentina

Background: The prevalence of HIV among male sex workers (MSM) in WHO region 5.2 is 8.7% (7.7% in urban) and 10.4% in rural. The Prevalence of HIV in Kenya is 5.4%. This study aimed at determining the HIV infection risk of male sex workers who have sex with men (MSM-SW) in Nairobi, Kenya.

Methods: The Brief HIV Knowledge Questionnaire (HIV-KQ-18) was self-ad-
ministered to MSM recruited through RDS (respondent driven sampling) for a study on predictors of HIV risk behavior among MSM. Participants answered items by indicating whether they think each is true, “false”, or “don’t know”. A single score was obtained by summing the items answered correctly (‘don’t know’ responses are scored incorrectly). Scores greater than one item removed from the questionnaire. Higher scores indicate greater knowledge.

Results: Analysis of HIV-KQ-18 suggests that information alone is not enough for HIV prevention given that MSM with higher formal education level and with higher knowledge score have higher HIV prevalence. Other factors besides knowledge and information should be considered in the development of HIV prevention campaigns.

Presenting author email: balanid@nyspc.com.columbia.edu
WEPE0317
Community-based, real-time, HIV/AIDS outreach and prevention programmes for MSM in Chiang Mai Thailand based on behaviour research: producing context-specific, high impact, low cost animations as prevention resources for use online and with mobile phone/MP3 players across work, social and friend networks

O.-A. Thammanjinda1, N. Chaiya1, C. Walsh1, P. Lesabe1
1Panyaya University, McCormick Faculty of Nursing, Chiang Mai, Chiang, Kingdom

A recent demographic survey found that HIV incidence among MSM in Bangkok increased from 17.7% to 31.3% in 2007 to 2009. In 2010 63% of new cases in Chiang Mai rose from 15.3% in 2005 to 16.9% in 2007, while rates in Phuket increased from 5.3% to 20%. This points to the fact that HIV prevention programmes in Thailand fail to reach MSM. Mplus, a CBD adapted its prevention strategy and created a new portfolio of risk behaviour and situations involving the MSM, transgenders (TG) and Thai and migrant male sex workers (MSW) and their clients and partners due to changing contexts both on and offline. Using data generated from behaviour research of 100 local MSM, Mplus produced animations making use of context-specific narratives with the target population with whom the research was carried out. The animations were incorporated into an established HIV prevention programme via mobile phones/MP3 players and distributed to different social/sex workers and clients. The animations were also incorporated into real-time and online peer education and popular opinion leader programmes and are available in 4 regional dialects/languages.

MSM find the animations engaging and related to their lifeworlds. They help them understand the risks associated with various sexual activities and the consequences of unsafe sex for themselves and their partners/spouses. The animations are new educational resources that help MSM understand HIV prev- ention, various context specific scenarios where risky behaviour may lead to HIV infection, and also increase the ability of MSM to negotiate safe sex with potential partners or clients. This presentation will screen the animations and illustrate how organized responses to HIV/AIDS must begin at the community level and that community engagement is an essential part of prevention. Numerous opportunities exist for using mobile technologies and Web 2.0 software to design effective and appropriate interventions for HIV/AIDS prevention.

Presenting author email: c.s.walsh@open.ac.uk

WEPE0318
MSM access to VCT in a conservative environment, case of Egypt

I. Abdul Salam1, C. Soliman1, B. Baha1, M. Moustafa2, S. Shawky1, N. M. M. AlMasry2, A. M. M. El-Sayed1
1Ministry of Health, National AIDS Program, Cairo, Egypt, 2Family Health International, Cairo, Egypt

Issues: Although HIV prevalence in Egypt is low (< 0.1%), available evidence from the 2006 Biological Behavioral Surveillance Survey indicates relatively higher rates of infection among most-at-risk-populations (MARPs). However, little is known about the MSM population and there is a lack of targeted interventions due to high stigma. VCT services are widely available in Egypt. However to which extent MSM access these services is to be explored.

Description: The Egyptian network of VCT services provides a standardized care of STI and HIV aimed towards MSM. That’s why Alternative-Cameroun, United Kingdom, that the MSM and the active file in the “Access Centre” and the situation will be reinforced to some of these activities in 2010 address the increasing needs of MSM reinforce our belief that this population needs some specific interventions.

Lessons learned and next steps: Our activities increased visit rates by 30% to 25% by making our services available online. The activities increased the “Access Centre” average visit rates per month, which increased from 210 in 2008 to 325 in 2009. We sensitized during these activities 615 MSM, distribute 4701 condoms and 5659 lubricating gel doses; 126 MSM went through early detection during this year for an active file of 50 MSM taken care of for HIV infection.

Presenting author email: e.roos@schorernet.nl

WEPE0319
Sexual risk behavior among young gay- and bisexual men in the Netherlands

P. van Beek1, E. Boog2, H. Hospers2
1Schorer, HIV/STI Prevention, Amsterdam, Netherlands, 2Maastricht University, Maastricht, Netherlands

Background: Two studies that have collected data about young gay and bisexual men (YGBM) in the Netherlands shall be presented. In both studies, a relatively high level of unprotected anal intercourse (UAI) was reported. These studies underscore the need for development of HIV-preven- tive interventions targeting YGBM.

Methods: Data were gathered by means of online and tailored questionnaires. Outcomes is a longitudinal research project aimed to study sexual risk behavior and coming-out issues of YGBM. The study population consisted of 185 YGBM, who are in the midst of their coming-out. Schorer Monitor is an annual cross-sectional behavioral surveillance on health, well-being and sexuality of men who have sex with men (MSM). More than 3000 gay and bisexual men respond each year.

Results: Outcomes found that it is not unlikely that YGBM report UAI. Overall 45% of the respondents reported UAI with their first same-sex partner. In addition to this, between 34% and 37% of respondents engaged in at least one episode of UAI in the six months preceding each data wave. In Schorer Monitor, UAI among 25-year-old and younger participants increased from 32% in 2006 to 37% in 2008. Seeking casual sex partners on the internet correspond with more UAI (36%) than those who do not (23%), while most young MSM meet their sex partners on the internet.

Conclusions: Data clearly indicate that YGBM are not sufficiently prepared for HIV and STI risks and thus form a high risk group that needs special attention. These studies provide information with respect to the content of HIV-preventive interventions targeting YGBM. It is necessary to educate and inform YGBM as early as possible and facilitate their learning of existing facil- ities. During the development of interventions for YGBM it is important to take into account their specific social and sexual behavior.

Presenting author email: e.roos@schorernet.nl

WEPE0320
Support the access to information on STI/HIV/AIDS for the men who have sexual relations with other men (MSM) through the opening of a center of prevention and care of STI/HIV/AIDS adapted to the realities and needs of the MSM in the town of Douala, Cameroon

Y.F. Roger Yoss, C. Tchanké, S. Maaliedji Mbye, D. Makong, T. Pouani

Issues: In Cameroon the law penalizes sexual intercourse between same sex people. There is neither civil organization nor public policy for prevention and care of STI and HIV aimed towards MSM. That’s why Alternative-Cameroun association opened in 2008 the “Access Centre”, a center for prevention and care for MSM.

Description: From the beginning it was necessary to keep “Access Centre” alive by setting up activities to support information access for MSM in the city. In this framework, the following activities were initiated: semi-monthly educational talks, Internet permanenaties at “Access Centre” on cruising sites attended by MSM, prevention permanenaties in the Centre, started last year, aiming better information for the MSM meeting during activities at the Centre. These activities increased the “Access Centre” average visit rates per month, which increased from 210 in 2008 to 325 in 2009. We sensitized during these activities 615 MSM, distribute 4701 condoms and 5659 lubricating gel doses; 126 MSM went through early detection during this year for an active file of 50 MSM taken care of for HIV infection.

Lessons learned and next steps: Our activities increased visit rates by 30% to 25% by making our services available online. The activities increased the “Access Centre” average visit rates per month, which increased from 210 in 2008 to 325 in 2009. We sensitized during these activities 615 MSM, distribute 4701 condoms and 5659 lubricating gel doses; 126 MSM went through early detection during this year for an active file of 50 MSM taken care of for HIV infection.

Presenting author email: guyphode@yahoo.fr

WEPE0321
Need for social approval and fears about being sexually rejected predicts subsequent risky sexual behavior among men who have sex with men (MSM)

M.B. Di Domencio1, A. Berindean-Coroiu1, T.A. Hart1,2, T. Myers1, D. Calabrese1, M. Louthy1
1RYerson University, Psychology, Toronto, Canada, 2University of Toronto, Daniels Lake School of Public Health, Toronto, Canada, 3Women’s College Hospital, Toronto, Canada

Background: Previous research has suggested a relationship between exces- sive Need for Social Approval and unprotected anal intercourse (UAI) among MSM through related constructs such as social anxiety (e.g., Hart et al., 2008). Excessive Need for Social Approval may lead to greater fear of being sexually rejected if one insists on condom use, which has been found to be associated with UAI (Ofir et al., 1993). The current study explored Fear of Being Sexually Rejected (FSR) for insisting on condom use as a mediator in the relationship between excessive need for social approval and UAI among MSM.

Methods: 157 sexually active MSM recruited from community medical clin-
ics and gay media in Toronto, Canada completed Audio Computer Assisted Self-Interviews at baseline and 6-month follow-up. At baseline, participants reported their Need for Social Approval and FSR. At follow-up, participants reported any UAI in the past 6 months, with 34.2% engaging in this behaviour. Using logistic regression with UAI as the dependent variable, Social Approval was entered into Step 1, and FSR was entered into Step 2.

**Results:** In the multivariable regression, Social Approval (OR = 1.80, 95% CI [1.26, 2.58]) and FSR (effect size = 2.00) were positively associated with subsequent UAI. Social Approval was associated with FSR, FSR (Sobel test effect size = 1.71, 95% CI [1.17, 2.30]) was positively associated with subsequent UAI. Social Approval was associated with FSR, FSR was positively associated with subsequent UAI, and Social Approval was associated with FSR, FSR partially mediated the relationship between Social Approval and UAI.

**Conclusions:** This study extends previous research on social anxiety and UAI by indicating that those who have a high need for Social Approval may be at higher risk for engaging in risky sex, partially because they may have higher FSR. Future HIV prevention should address FSR, especially for MSM who have a high need to be socially approved by others. Both need for Social Approval and FSR may be highly amenable to HIV prevention counselling programs for MSM.

Presenting author email: mdidomen@ryerson.ca

### WEPE0324

**WEPE0324**

**Project ECHO: adopting an effective HIV prevention intervention, personalized cognitive counseling, for episodic substance-using men who have sex with men (SUMSM)**

M. Dasi1, R. Badasavich, T. Matheson1, G.-M. Santos1, D. Gelaude1, J. Herbst1, K. Knight2, D. Diley1, D. Copp1

1San Francisco Department of Public Health, HIV Prevention Section, San Francisco, United States, 2University of California San Francisco (UCSF) Division, San Francisco, United States, 3Centers for Disease Control and Prevention (CDC), Prevention Research Branch, Atlanta, United States, 4University of California San Francisco (UCSF) / San Francisco General Hospital (SGFH), Positive Health Practice, San Francisco, United States, 5University of California San Francisco (UCSF) / San Francisco General Hospital (SGFH), Psychiatry, San Francisco, United States

**Background:** Episodic (less than weekly) drug use and binge drinking increase HIV-related sexual risk behaviors among MSM, yet no evidence-based interventions exist for these men. We conducted formative research to adapt the Personalized Cognitive Counseling (PCC) HIV prevention intervention for episodically using, PCC employs a survey instrument to elicit self-justifications (SJ) of individuals who report unprotected anal intercourse (UAI).

**Methods:** We enrolled 59 SUMSM reporting recent UAI and concurrent use of methamphetamine, poppers, cocaine, or binge drinking. We conducted struc-
tured in-depth interviews with 20 SUMSM to elicit sexual narratives and con-
textual SJ items. Interview transcripts were structurally coded; SJs were identified and prioritized for inclusion in the adapted intervention instrument, which was tested among 19 SUMSM. The adapted instrument and PCC intervention were piloted among 20 SUMSM.

**Results:** Participants were ethnically diverse (White, 48%; Latino, 24%; Mixed Race, 12%; Asian-Pacific Islander, 10%; Black, 5%; Native-American, 1%), and reported UAI and concurrent binge drinking (80%), and poppers (49%), methamphetamine (24%), and cocaine (14%) use. We added 31 new SJs, adapted 17, and dropped 15 from the original SJ instrument. Emergent SJ themes are shown in Table 1.

**Conclusions:** PCC intervention was adapted for high-risk episodic SUMSM. This work is important as these men may not seek conventional drug treatment. While we identified many new SJs, several SJs echoed statements found in the original instrument, suggesting that there are certain messages resonating for high-risk MSM as a whole. The efficacy of the adapted PCC intervention will be evaluated in a randomized trial.

Presenting author email: hongchen200606@hotmail.com

### WEPE0325

**WEPE0325**

**Unobserved heterogeneity in the effect of a randomized-controlled prevention trial among men who have sex with men**

D. Smolenski1, J.M. Wilkerson, B.R. Rosser

1University of Minnesota School of Public Health, Division of Epidemiology and Community Health, Minneapolis, United States

**Background:** The Men’s Instant Study randomized trial identified a short-term, but no long-term effect in reducing high-risk sexual behavior. In this investigation, we considered the impact of unobserved heterogeneity in both the treatment and control arms to determine if there were subgroups that varied as a function of change over time.

**Methods:** In 2006, 650 MSM were randomized to complete an online intervention or a standard questionnaire. The primary outcome was the number of male unprotected anal sex partners (UAPM) over the three months prior to study enrollment and at each of the 3-, 6-, 9-, and 12-month follow-ups. We estimated iterative latent classes of the five time-point growth curves using a semi-continuous model to account for zero inflation. We tested both linear and quadratic growth curves.

**Results:** The quadratic growth curves produced better fit to the data. Model improvement yielded three comparable classes in each exposure group. Comparison between treatment and control identified that the high-risk (10% of sample) and low-risk (64% of sample) groups were significantly different. The moderate risk curve (26% of sample) had an equivalent intercept, but a steeper linear slope for the treatment group. Figure 1 displays the growth curves.

Presenting author email: grant.coffey@sfdpd.org
WEPE0326
Evaluating strength based social marketing campaigns targeting young men who have sex with men that address family rejection and homophobia by modeling love and support
F. Rogue
GMHC, Institute for Gay Men’s Health, New York, New York, United States

Description:
GMHC created 2 SMC’s entitled “I love my boo” and “My son is my life” highlighting young gay men of color in loving and supportive relationships with their partners and their fathers. These 2 SMC’s were created with community input and were widely disseminated in NYC. AIDS Committee of Ottawa (ACO) in Canada also replicated these campaigns and both GMHC and ACO conducted evaluations of their designs. “My son is my life” was in part conceptualized in response to research recommendations to address family dynamics and consider the role of families when assessing risk decision making. This campaign provides support, guidance and information on how fathers can accept gay sons. The goal was to change community norms by increasing fathers understanding of the impact they can have on their gay child’s well-being. “I love my boo” features young men of color loving each other unapologetically. It contextualizes gay relationships, showing what is possible through love and respect.

Lessons learned: We will demonstrate how social marketing campaigns developed with community input like these with the aim of modeling love and support and creating strength based social marketing campaigns that build upon existing resilient communities within individuals and communities to build upon self-efficacy and effectively lower HIV risk behaviors.

Presenting author email: francis@ogmhc.org

WEPE0328
Undiagnosed HIV infection among men who have sex with men (MSM) in Vancouver, Canada
R. Hoole, D. Moore1, S. Kanters1, R. Gustafson2, T. Trussler3, R. Marchand4, P. Banks5, M. Kwag6, M. Compton7, A. Schilder1, M. MacGuire8, S. Ogunsanya-Cooker, M. Perrin1, T. Wong, C. Archibald9, M. Michelow10, M. Gilbert11, The Man Count Study Team
1 BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 2Vancouver Coastal Health, Vancouver, Canada, 3Community Based Research Centre, Vancouver, Canada, 4Health Initiative for Men, Vancouver, Canada, 5Public Health Agency of Canada, Ottawa, Canada, 6BC Centre for Disease Control, Vancouver, Canada

Background: MSM account for the majority of HIV infections in Canada. The burden of undiagnosed HIV infection in MSM in Vancouver is unknown. We examined the prevalence and context of undiagnosed HIV infection among a sample of this population.

Methods: The Man Count Study recruited participants from August 1, 2008 to February 28, 2009 through community venues which cater to MSM. Men aged ≥18 years completed a self-administered questionnaire and provide a dried blood spot (DBS) for HIV testing. Stored plasma samples were re-tested using the STARRS algorithm to determine recent infection.

Results: 1,139 participants provided samples for DBS and 959 self-reported their status as HIV-negative or unknown. Of these 28 (2.9%) tested HIV-positive which represented 13% of the 202 men who were tested with the DBS tests, 9 (3.2%) were classified as recent infections by not confirmed assays, 20 individuals (71%) had previously tested for HIV and had undergone a median of 2 HIV tests (IQR 0 - 4 tests) in the previous 2 years. The most common reported reasons for the 16 individuals not known to have tested in the previous 2 years included: not wanting to know (n=4) or being unable to cope with the result (n=4); a conviction that they were already HIV-infected (n=4); not having the initiative to get tested (n=4) and concern about the impact on their relationships (n=5). 82% of these men reported using at least one behavioural measure to reduce their risk for HIV infection. Overall, 10 (50%) of 20 respondents felt that they were very unlikely or unlikely to acquire HIV during their lifetime.

Conclusion: Undiagnosed HIV infection accounts for a small, but important proportion of HIV-positive MSM who attend venues catering to gay or bisexual men. Strategies to reduce undiagnosed infections need to consider reducing barriers to testing and addressing perceptions of risk.

Presenting author email: dmoore@cbrc.ubc.ca

WEPE0329
How to select the better sites to focus the prevention strategies in a concentrated epidemic country? The Mexico’s proposal for the Global Fund to Fight AIDS, Tuberculosis and Malaria (GF)
Centro Regional para la Prevención y el Control del VIH/SIDA - CENSIDA, Mexico, Mexico

Background: The HIV/AIDS epidemic in Mexico is urban and concentrated among MSM (HIV prevalence=6%). Mexico must improve the quality and coverage of its HIV/AIDS prevention strategies. The primary focus is to reduce HIV transmission through the development and implementation of prevention strategies for MSM and IDU populations.

Methods: To select the geographic metropolitan areas/cities an special index was constructed, considering the size of the city, the HIV/AIDS prevalence, the percentage of the MSM population and the AIDS male/female ratio. Sexual behavior surveys, national AIDS/HIV databases and populations estimates were used. Finally, the cities were ranked according with the index constructed.

Results: 44 metropolitan areas/cities were selected for MSM interventions and 4 cities for IDU interventions. Together, in these 44 cities lives the 74 percent of Mexico’s MSM population, and represents the HIV infection amongst AIDS cases among MSM (2003-2008). The 4 selected cities of IDU represent the 45 percent of the national estimate of the new AIDS cases. 31 of the 32 states in the country were included. This coverage will contribute to ensuring more equitable accessible of services for the most affected and in need populations.

Conclusions: Mexico’s proposal was approved by the GF round 9 (aprox 70 billions USD, 5 years). The main goal is to reduce the HIV prevalence in MSM from 10 to 8 percent in the 44 selected cities; to reduce the HIV
WEPE0330
LIFEGUARD: HIV prevention campaign for gay men through safer sex workshop at gay bars in Japan
S. Izuoka, K. Shimada1, S. Oy, A. Fujitsu1, T. Oishi, H. Edo2, K. Kawaguchi3
OCCUR, Tokyo, Japan, 1Japan Foundation for AIDS Prevention (IFAP), Tokyo, Japan, 2Hiroshima Shudo University, Hiroshima, Japan

Issues: In Japan, nearly 70% of new HIV cases are among MSM in recent years. As male-to-male sex is frequently denied due to stigma and discrimination, it forces HIV epidemic underground and threatens health of gay men in Japan. Despite the efforts of a few NGOs and government programs, much remains to be done.

Description: Between September 2009 and February 2010, LIFEGUARD was conducted at 10 gay bars in Japan and worked in collaboration with 5 local governments. This evidence-based intervention, which was designed based on HIV risk assessment survey (N=341), resulted in the development and delivery of a comprehensive HIV prevention campaign for gay men. The prevention campaign includes participatory, BCC workshop, condom use, social marketing through peer educators, capacity building of communities, educational games on safer sex strategies, videos distributed on YouTube, online outreach utilizing gay social networking sites, individualized counseling on HIV and gay related issues, and referrals to HIV/AIDS services and community-based organizations.

Lessons learned: Establishing presence in gay bars where gay men traditionally go, conducting peer-facilitated intervention is an effective strategy for overcoming obstacles such as lack of privacy-considered space, shame speaking about sexuality, and limited access to education and prevention skills in the hetero-central society.

Participatory monitoring and evaluation showed an increase in condom use, positive attitude towards HIV testing, reduction of stigma and discrimination, and enhanced self esteem. Another key finding was the fact that even in a small community people were motivated to be involved in HIV prevention, and gay bars can function as base sites in their communities.

Next steps: LIFEGUARD can be successfully scaled up by being adopted in other MSM communities in the world where can share common characteristics of gay/MSM communities.

Presenting author email: shingoi03@r7.dion.ne.jp

WEPE0331
A systematic review of interventions for men who have sex with men (MSM) in China: in need of theory-driven, community-based, and sustainable HIV prevention
A. Liu1, H. Yi1, T. Liu2, J. Li3
1China National Centre for AIDS/STD Control and Prevention, National Center for AIDS/STD Control and Prevention, Beijing, China, 2Columbia University and New York City Department of Health, New York, NY, USA, 3Department of Public Health, BGI, Beijing, China

Background: Recent years have seen growing research interest in men having sex with men (MSM) in Chinese-language journals. Ten studies evaluated MSM at the provincial level; the other two assessed MSM throughout China. The systematic review was conducted in Chinese-language journals. Ten studies evaluated MSM at the provincial level; the other two assessed MSM throughout China. The systematic review was conducted in Chinese-language journals.

Methods: We conducted a systematic literature search on both English and Chinese databases, using keywords "HIV or HIV/AIDS", "MSM", "China"; and "intervention". Mainland China-based interventions were included if they were published in English or Chinese journals, and had no access to preventive HIV information. The bill on homosexuals in China has driven this group underground. More people are presenting as bisexuals, which has created an additional risk of spreading the infection to their female counterparts. Furthermore, funding for interventions involved in prevention of HIV transmission services to gay couples hangs in the balance.

Lessons learned: AIC has created and maintained an environment of confidentiality, which has attracted the high-risk MSM who had never been tested and had no access to preventive HIV information. The bill on homosexuals in China has driven this group underground. More people are presenting as bisexuals, which has created an additional risk of spreading the infection to their female counterparts. Furthermore, funding for interventions involved in prevention of HIV transmission services to gay couples hangs in the balance.

Next steps: Resistance and denial mean that a great deal remains to be done to reach gay couples. Lack of information, in itself compounded by a lack of harmonization of legal and public health policies and practice, are serious constraints. More research needs to be done on the socio-economic heterogeneity of such groups, their geographically varying composition, and overlaps with other risk groups.

Presenting author email: rbyaru@yahoo.com

WEPE0332
HIV counseling and testing among men who have sex with men (MSM) in Uganda: the AIC-Uganda perspective
R. Byaruhanga
AIDS Information Centre-Uganda, Executive Director, Kampala, Uganda

Issues: In Uganda, homosexuality is illegal and taboo. Consequently, MSM are rarely accessed by HIV prevention programs despite their elevated risk of infection. It is estimated that there are 4,000 MSM in Uganda and they contributed 559 new infections. Considerably little is known about the role of sex between men in the AIDS epidemics in Uganda. The lack of information is related to denial, intense stigmatization and criminalization of same sex relations.

Description: AIC is at the forefront of providing free HIV Counseling and testing (HCT) to couples. During this campaign the counselors at AIC counseled and tested gay MSM & lesbians. The counselors lacked guidelines for the provision of HCT and related support that is sensitive to issues unique to gay couples.

Lessons learned: AIC has created and maintained an environment of confidentiality, which has attracted the high-risk MSM who had never been tested and had no access to preventive HIV information. The bill on homosexuals in Uganda has driven this group underground. More people are presenting as bisexuals, which has created an additional risk of spreading the infection to their female counterparts. Furthermore, funding for interventions involved in prevention of HIV transmission services to gay couples hangs in the balance.

Next steps: Resistance and denial mean that a great deal remains to be done to reach gay couples. Lack of information, in itself compounded by a lack of harmonization of legal and public health policies and practice, are serious constraints. More research needs to be done on the socio-economic heterogeneity of such groups, their geographically varying composition, and overlaps with other risk groups.

Presenting author email: rbyaru@yahoo.com

WEPE0333
Psychosocial analysis of the use of rapid screening test for HIV/AIDS in a community-based environment
E. Suarez Diaz1, T. Apostolidis1,2, M. Preau3, J.M. Le Gall4, K. Champenos1, Y. Yazdanpanah1,2
1Univerité de Provence, Laboratoire de Psychologie Sociale, Aix in Provence, France, 2INSERM UMR 912, Marseille, France, 3Univerité de Nantes, Nantes, France, 4AIDES National, Pantin, France, 5Faculté de Médecine de Lille EA 2694, Lille, France, 6LEM CNRS UMR8179, Service Universitaire des MS, Lille, France, "Service des Maladies Infectieuses et du Vaccinage", Centre Hospitalier de Tourcoing, Lille, France, "Faculté de Médecine de Lille, Lille, France

Issues: The use of the rapid screening test for HIV in a community-based context is innovative and gives rise to many questions, particularly regarding the implications for community actors engaged in such an intervention. The research presented here looks at this situation from a psychosocial point of view, by examining the viewpoints of the community actors and participants involved.

Description: Our research is based on the ComTest point protocol. In the context of this new rapid screening intervention in a community-based context, we explore the associated psychosocial questions for the participants and community actors involved. We use a qualitative method to collect data which consists in interviewing voluntary participants during the first month of the intervention and then again at the end of the first month. The initial phase of the primary aim of the study is to understand how community actors adapt and acquire new skills and experience. Lexicographic analysis was carried out using Aoste software.

Lessons learned: The analysis highlights a discursive focus in the context of the intervention when compared with other medical practices. Participants define screening in a community-based environment as a complementary offer to other existing offers. Nevertheless, they underline the importance of counseling, defined as facilitating a trusting relationship and encouraging communication. In their opinion, the real issue in terms of prevention is not trying to change sexual behaviors but rather making the screening test commonplace as a preventive strategy.

Next steps: This first phase of the analysis presents a snapshot of attitudes, representations and experience of the study’s participants at the initiation of their intervention. The second analysis should help us understand the evolution of attitudes and practices in terms of prevention, and particularly experiences between participants and community actors.

Presenting author email: emmanuelle.suarezdiaz@gmail.com
WEPE0335

**Title:** Generational differences in sources of first MSM-specific sex education among MSM in Switzerland

**Authors:** A. Jeanin, S. Locirico, B. Spencer, F. Dubois-Arber

**Institutions:** University Hospital Center and University of Lausanne, Institute of Social and Preventive Medicine, Lausanne, Switzerland

**Background:** Although sex education at school addressed to the general population (i.e. mostly heterosexual) is widespread in Switzerland, little is known about the spread of MSM-specific sex education. This study provides a cross-sectional analysis of the context in which gay men received MSM-specific HIV/AIDS prevention advice for the first time.

**Methods:** Data from a 2009 cross-sectional survey among a convenience sample of Men who have Sex with Men (MSM) living in Switzerland. Respondents were recruited through online questionnaires, paper questionnaires inserted in the main gay newspapers and among members of gay or HIV/AIDS NGOs. We inquired about the context where respondents had first been given advice about HIV/AIDS prevention specific to MSM, and at what age this had occurred. To decrease noise due to migration, only MSM who were Swiss nationals, living in Switzerland, and aged 16 or more (i.e. post mandatory school education) were included in the analysis (N=1559). Respondents were classified into 10-year generations.

**Results:** Older generations of MSM received their first MSM-specific sex education mostly through mass media whereas younger generations were more likely to have first received information at school or college (figure). In all generations, a constant minority of MSM (19%) received it through gay NGOs; this proportion decreased only in the youngest generation.

**Conclusions:** The context of first MSM-specific sex education has changed markedly across generations. The shift in first source of MSM-specific sex education probably indicates change in the context of sex-education programmes.

Presenting author email: andre.jeanin@chuv.ch

WEPE0336

**Title:** Are MSM in Guatemala practicing “safe sex”? Risk perception and prevention among MSM in Guatemala

**Authors:** C. Galindo, I. Sanchez, M. Aguilar, M. Mazariegos

**Institutions:** Colectivo Friends against AIDS (Colectivo Amigos contra el Sida), Guatemala

**Background:** The HIV profile in Guatemala corresponds to a concentrated epidemic affecting mainly MSM. Within the framework of UNGASS reporting, Friends Against AIDS, Guatemalan NGO orienteers in support groups in the fight against AIDS, carried out a rapid assessment of condom use among MSM, to identify progress made in condom use.

**Objective:** To assess condom use among MSM in Guatemala city and Mazatenango to compare results and identify gaps and opportunities of improvement CBC strategies for MSM.

**Methods:** For this analysis we reviewed the literature and provided information regarding the use of condom during last antrual intercourse with a male partner.

**Results:** Condom use during last intercourse among MSM is low: in the capital city of Guatemala, approximately one third of MSM age 15-18 reported condom use, increasing to almost one half in MSM age 25+. The situation worsened in Mazatenango were less than 20% of MSM reported condom use during their last sexual intercourse. Condom use was higher for younger MSM and decreased with age.

**Conclusions:** MSM in Guatemala remain a high risk group, predominantly not having “safer sex” (condom use). Thus, this population is urgently in need of more effective CCC interventions parallel to increased access to HIV prevention services. Lack of coherence between the epidemic profile and resource investments in prevention strategies should be revised and reoriented to ensure effective approaches for MSM.

Presenting author email: tsanchez@amigoscontraelsida.net

WEPE0337

**Title:** A CBPR partnership increases HIV testing among MSM: outcome findings from a pilot test of the CyBER/testing intervention

**Authors:** S. Rhodes1, K. Hergenrather2, A. Vissman1, J. Stowers3, T. McCoy4, A. Wilkin5, M. Reece6, A. Scheibe1, R. Wood1,3, L.-G. Bekker1,3, S. Ross7, E. Hendrix8, E. Eng9

**Institutions:** 1Desmond Tutu HIV Foundation, Cape Town, South Africa, 2University of California at Los Angeles, Los Angeles, United States, 3University of Cape Town, Institute of Infectious Disease and Molecular Medicine, Cape Town, South Africa

**Abstract:** In October 2008, the Desmond Tutu HIV Foundation (DTHF) began enrolling MSM for an HIV prevention clinical trial in Cape Town, South Africa. As part of the preclinical research phase, the Foundation initiated the CyBER/testing intervention. The intervention was designed to promote HIV testing among MSM within internet chatrooms. The intervention was implemented for 6 months within one geographically oriented chat room designed for social and sexual networking among MSM. Using a quasi-experimental single-group study design, cross-sectional data were collected from chat room participants, known as “chatters”, at pretest (n=346) and post-test (n=315). Extent profile data also were collected to describe the demographics of a sample of the general chat room population (n=509) during one week.

**Results:** Mean age of the chatters at pretest (n=346) was 37.2 years, 71.3% self-identified as white and 20% reported having sex with both men and women. There were no significant demographic differences among chatters who participated in the pretest and the post-test and the sample of the general population of chatters. However, those in the post-test had significantly higher self-reported HIV testing rates: 44.5% at pretest and nearly 59.4% at post-test (P< .001). Furthermore, chatters who reported having both male and female sexual partners had nearly 6 times the odds of reporting HIV testing at post-test (P< .001).

**Conclusions:** Findings suggest that chat room-based HIV testing interventions may increase testing among MSM who may be difficult to reach in traditional physical spaces and among those who have sex with both men and women.

Presenting author email: srhodes@wfubmc.edu

WEPE0338

**Title:** Recruitment methods for enrolling high-risk men who have sex with men (MSM) into an HIV prevention clinical trial in Cape Town, South Africa

**Authors:** B. Brown1, E. Burrell2, A. Scheibe1, R. Wood1,3, L.-G. Bekker1,3

**Institutions:** 1Desmond Tutu HIV Foundation, Cape Town, South Africa, 2University of California at Los Angeles, Los Angeles, United States, 3University of Cape Town, Institute of Infectious Disease and Molecular Medicine, Cape Town, South Africa

**Abstract:** In 2008, the Desmond Tutu HIV Foundation (DTHF) began enrolling MSM for an HIV prevention clinical trial in Cape Town, South Africa. As part of the preclinical research phase, the Foundation initiated the CyBER/testing intervention. The intervention was designed to promote HIV testing among MSM within internet chatrooms. The intervention was implemented for 6 months within one geographically oriented chat room designed for social and sexual networking among MSM. Using a quasi-experimental single-group study design, cross-sectional data were collected from chat room participants, known as “chatters”, at pretest (n=346) and post-test (n=315). Extent profile data also were collected to describe the demographics of a sample of the general chat room population (n=509) during one week.

**Results:** Mean age of the chatters at pretest (n=346) was 37.2 years, 71.3% self-identified as white and 20% reported having sex with both men and women. There were no significant demographic differences among chatters who participated in the pretest and the post-test and the sample of the general population of chatters. However, those in the post-test had significantly higher self-reported HIV testing rates: 44.5% at pretest and nearly 59.4% at post-test (P< .001). Furthermore, chatters who reported having both male and female sexual partners had nearly 6 times the odds of reporting HIV testing at post-test (P< .001).

**Conclusions:** Findings suggest that chat room-based HIV testing interventions may increase testing among MSM who may be difficult to reach in traditional physical spaces and among those who have sex with both men and women.

Presenting author email: srhodes@wfubmc.edu
WEPE0339

Estimation of the hidden and vulnerable population of men who have sex with men (MSM) in Nigeria


Background: MSW (who have sex with men) are a highly marginalised population in Nigeria. This is due to the prevalence of secrecy, and HIV risk are highly associated with this lifestyle. In Nigeria, studies show HIV prevalence for MSM at 13.5%, and over 20% of all MSM was known to have HIV at least once in their lifetime. The number of MSM in Nigeria is unknown due to the lack of reliable and accurate information within the population. This is information necessary to shape interventions and conduct effective advocacy with policy-makers and practitioners.

Methods: A population-based enumeration of MSW using the ‘capture-recapture’ methodology was conducted in 2 Nigerian cities, Lagos and Kano, in 2009. MSW were identified by the intervention and various scenarios of efficacy and consistency of use were explored.

Results: On any given Friday night in Lagos, an estimated 865 (95% CI: 707-1023) men are willing to engage in sex for money or goods with other men. In Kano on any given Saturday night, 641 (95% CI: 577-705) men are willing to engage in sex for money or goods with other men.

Conclusions: MSMs are a visible and significant community in Nigeria. With careful planning and sensitive intervention strategies, MSW can be effectively engaged through prevention, care and support programs. However, location-based enumeration is necessary part of the picture. Further in-depth study is needed to engage this community effectively.

Presenting author email: akarinl@popcouncil.org

WEPE0340

Modelling the potential impact on HIV transmission of rectal microbicide use by men who have sex with men, and the microbicide and condom substitution


London School of Hygiene & Tropical Medicine, Public Health & Policy, London, United Kingdom; IIMPACTA, Lima, Peru; ‘Imperial College, London, United Kingdom; ‘Karnataka Health Promotion Trust, Bangalore, India; ‘University of Manitoba, Winnipeg, Canada; ‘John’s Research Institute, Bangalore, India; ‘University of Washington, Seattle, United States

Background: In India and Peru the HIV epidemic remains concentrated in high-risk groups including men who have sex with men (MSM). Given the challenges of condom use, interest has grown on the potential role of a rectal microbicide for MSM. There are no previous estimates of the likely public health impact of a microbicide in any low- or middle-income-country.

Methods: Detailed epidemiological and behavioural data from Bangalore and Lima were obtained to parameterise and fit a dynamic compartmental model. The joint transmission dynamics of HIV, syphilis and herpes were simulated over three behavioural subgroups of MSM. Potential evolution of the HIV epidemic was investigated with and without a 5-year microbicide intervention. It was assumed that 30% of the total MSM population would be reached by the microbicide with various scenarios of coverage and consistency of use were explored.

Results: The table illustrates that an 85% efficacious microbicide used in half of non-condom-protected sex acts could avert over 17% of HIV infections among MSM in both settings if condom use remains at pre-microbicide levels. However, if condom sex acts are condoned, the trade-off is increased microbicide production, then impact lessens, and HIV infections are predicted to increase among MSM in Lima.

[Table: Preliminary model projections]

Conclusions: This study highlights the importance of pursuing further research and investment for developing rectal microbicides. The public health benefit from an effective rectal microbicide could be considerable if used consistently, but condom use must be adopted in order to avoid potentially increasing risk.

Presenting author email: andrew.coxx@kthm.ac.uk

WEPE0341

Scaling up HIV interventions among MSM in Togo

K. Kounangaou, S. Kassegne, B. Clapham, Men who Have Sex with Men (MSM)


Issues: Men who have sex with men (MSM) are often ignored or excluded from HIV prevention programs in Africa because of cultural and social barriers. In Togo, an exploratory study conducted in 2006 revealed the existence of MSM community. Due to the results of the study, a pilot program was launched in Lome in 2007. The project is progressively scaling up from Lome to three semi-urban cities: Atakpame, Arondja, and Kara.

Description: The main programmatic activities include providing information about HIV and condom use through interpersonal communication discussion group and special events implemented by peer educators. Mobile VCT services were promoted through peer educators and made available at special events.

In 2006, 2681 MSM were reached by peer educators. In 2009, this number increased to 4907. From April to December 2009, 73 MSM was tested.

Lessons learned: The main challenge of MSM in Togo have access to viable information concerning HIV transmission, condoms, lubricant, voluntary counselling and testing. Promotional activities that address psychosocial determinants of condom use and VCT are needed in order to increase the effectiveness of PSI’s intervention with MSM in Togo.

Next steps: Qualitative studies should be conducted to collect data that can be used to develop messages that influence determinants of condom use and VCT. Quantitative studies should also be conducted to monitor and evaluate changes in determinants of condom and VCT use due to programmatic activities.

Presenting author email: koffithis@yahoo.fr

WEPE0342

Addressing the sexual health needs of men who have sex with men (MSM) in the Middle East and North Africa (MENA) region using a participatory community assessment approach

T.T. Kisseri

The International HIV/AIDS Alliance, The Field Programmes-Africa, Brighton and Hove, United Kingdom

Issues: MSM are largely invisible in the MENA region. A regional programme has been developed and adapted a participatory community assessment (PCA) approach to meet the sexual health needs of men engaging in high risk sexual behaviour. This approach has been adapted to initiate work with other highly vulnerable groups identified as drivers of the epidemic, such as IDU, PLHA and MSM DU.

Description: The International HIV/AIDS Alliance initiated a pilot project in the MENA region in 2004, in partnership with six NGOs in Morocco, Algeria, Tunisia and Lebanon to addressing priority sexual health needs of MSM. Social and religious taboos and stigma and discrimination lead to most men concealing their sexual orientation and/or practices, especially from health workers. The PCA approach enabled NGOs to engage with the MSM community, identifying their priority needs with them, and strengthen them to develop and implement tailored programmes. Since the pilot phase of the project, PCA’s have been carried out in a number of new sites, successfully scaling up activities.

Lessons learned: 1. The involvement of the target community in the PCA process is key to success. If 20% fewer sex acts are condoned after microbicide introduction than expected, the legitimacy of the work. 2. The PCA is a tool to identify community leaders from high risk groups and build their capacity.
WEPE0343
Psychosocial determinants of condom use among MSM in Togo
K. Koumagnanou1, Y. Montcho1, S. Kassegne2, H. Astakou1, Men who Have Sex with Men (MSM)

Background: The HIV prevalence among MSM in Togo is estimated to be higher than 30%. An exploratory study conducted in 2006 indicated that in Togo MSM have their first sexual experience with a man at an early age: the average age of first sex with a man was 17.6 years. Sixty percent of the respondents used condoms at last sex while 21% percent used condoms consistently. The purpose of this study was to determine psychosocial determinants of condom use.

Method: A theory-based participatory qualitative study was conducted among MSM ages 18 and over. A total of 33 participants were recruited through social networks. MSM who self-identified as an active, passive and/or bisexual partner were interviewed by other MSM. Data were analyzed with participation from the MSM who conducted the interviews. Results: The data suggested a number of important ability and motivation related psychosocial determinants of condom use. Among these were attitudes toward condom use, perceived risk for being infected by HIV, peer social support for condom use and perceived confidence in ones ability to use condoms.

Conclusions: The findings suggest a need to develop communication messages that go beyond addressing HIV/AIDS risk perception and aim to influence MSM specific psychosocial determinants of condom use. Presenting author email: tkisserli@aidsalliance.org

WEPE0344
Stigma and discrimination negatively impact access to HIV prevention for lesbian, gay, bisexual and transgender populations in the Caribbean
A. Radix1, J. Didier1, V. Cenac1,2,3
1Columbia University Mailman School of Public Health, New York, United States, 2Caribbean Vulnerable Communities, Kingston, Jamaica, 3AIDS Action Foundation, Castries, Saint Lucia

Issues: Few Caribbean-based HIV prevention programs have targeted the LGBT community, due to high levels of societal stigma and legislation that criminalizes same-gender sexual activity. The health care experiences of the lesbian, gay, bisexual and transgender community in the Caribbean are not well understood. Understanding the interplay of sexual minorities with health care barriers and medical professionals is essential to designing targeted prevention programs.

Description: Members of the LGBT community in St. Lucia were interviewed to gain insight into their experiences of homophobia within the medical profession, ability to access sensitive and knowledgeable medical providers and to truthfully disclose issues related to sexual orientation and sexual behaviors. In addition they were questioned about issues related to personal safety and victimization within the community.

Lessons learned: 31% of LGBT persons had not disclosed their sexual orientation to their primary care provider. Only 6% had been able to access providers who were sensitive to the needs of LGBT persons. 44% were not able to discuss health related needs in an open and honest manner and only one-third knew of the existence of an LGBT-sensitive medical provider. 88% had experience physical or verbal abuse due to their sexual orientation or gender identity. When questioned about access to LGBT specific HIV prevention materials, only 57% had access to materials. < 15% of MSM were aware of the availability of post-exposure prophylaxis.

Next steps: Implementation of LGBT sensitivity training to improve cultural competency of health care providers and decrease stigma in health care envirnoment. The training and will be included in Furtive HIV prevention, treatment and care programs.

WEPE0345
Attitudes towards homosexuality among health care providers: a barrier to health care access for lesbian, gay, bisexual and transgender populations in the Caribbean
A. Radix1, J. Didier1, V. Cenac1,2
1Columbia University Mailman School of Public Health, New York, United States, 2Caribbean Vulnerable Communities, Kingston, Jamaica, 3AIDS Action Foundation, Castries, Saint Lucia

Background: The Caribbean has the second highest prevalence of HIV worldwide. The regional epidemic is predominately heterosexual however a significant proportion of cases, estimated at 25%, occurs among MSM. Implementation of targeted prevention interventions in the Caribbean has been slow due to high levels of societal stigma and discrimination towards sexual minorities. When accessing medical care, lesbian, gay, bisexual and transgender (LGBT) persons may not disclose their sexual orientation and behaviors due to fear of discrimination by medical providers, thereby preventing appropriate risk factor identification and effective treatment and care. International studies investigating health care barriers for LGBT populations have frequently cited homophobia amongst medical providers as an important determinant that restricts access. Few studies exist that evaluate the attitudes of Caribbean health care providers toward sexual minorities.

Methods: Government employed hospital and community health workers attending a cultural competency workshop in St. Lucia were invited to complete a validated 21-item Likert-scale questionnaire (Kite and Deaux, 1986) to examine their baseline (pre-workshop) attitudes to homosexuality. Chi Square, Student’s t-Test and multiple regression were used to determine the demographic and other factors associated with attitudes to homosexuality.

Results: Health care workers (n=25) were predominantly female (77%) and averaged 37.6 years. 28.6% of health care workers had scores consistent with negative attitudes toward homosexuals. Male gender, but not age was associated with lower tolerance scores (average male score: 63.25, average female score: 75.53, p = .095). 71% of health care workers indicated that they found homosexuality “sinful” and 36% found same-sex behaviors “repulsive”.

Conclusion: This study suggests that homophobic attitudes exist among health care workers in the Caribbean. LGBT sensitization training for health care workers should be incorporated into HIV prevention efforts in the Caribbean as a means of improving access to care and reducing health disparities for sexual minorities. Presenting author email: aradix@callen-lorde.org

Prevention for transgenders
WEPE0346-WEPE0350

WEPE0346
If you’ve got it, check it: establishing a sexual health clinic for transgender clients at a New York City community health center
J. Johnson1, A. Radix2, J. Santos-Ramos1, N. Levitt1, H. Reynolds1, G. Mayer1, R. Muerjearer1
1Callen-Lorde Community Health Center, New York, New York, United States, 2Columbia University, Mailman School of Public Health, New York, United States

Issues: Transwomen (transgender women, TMT) are disproportionately affected by HIV with reported prevalence of 11-68% however few studies have investigated HIV prevalence or risk factors among transmen (transgender men, FTM). Transgender individuals face multiple organizational and structural barriers to healthcare services, such as discrimination by healthcare providers, non-reimbursement of hormone and surgical therapies and limited preventive health services, including targeted HIV-prevention interventions. Callen-Lorde Community Health Center (CLCHC) is one of the few facilities dedicated to the care of the lesbian, gay, bisexual, transgender (LGBT) community. Approximately 9% of patients identify as transgender. In 2009 CLCHC created a transgender sexual health clinic (TGSHC) to address the sexual health concerns of transgender clients as well as provide comprehensive HIV/STI prevention services in a trans-affirmative setting.

Description: The TGSHC is staffed by medical providers, HIV counselors and social workers/ transgenders advocates. Clinic services are offered one night each week. Clients are offered HIV prevention and harm reduction counseling, HIV/STI screening, and counseling on hormone therapy and preventive health services. Clinical issues offer cervical, breast and testicular cancer examinations following best practice guidelines. Patients wishing to pursue gender confirming hormone or surgical therapy are linked to care. Trans-sensitive HIV prevention and health promotion materials were developed for the clinic. “If you have it, check it” brochures promote STI/HIV and cancer screening using trans-affirmative language. Patient satisfaction is measured with a 12-item questionnaire.

Lessons learned: 95% rate services as "very good" or "excellent." 23% of clients are transwomen and 77% transmen. 40% of transmen report high risk activity, e.g. unprotected anal or vaginal intercourse with men (trans-MSM), 64% consented to HIV testing, all were negative.

Next steps: Trans-sensitive HIV prevention services need to be developed, especially for the population of Trans-MSM who engage in high risk activity. Further investigation is needed to evaluate HIV risk factors in this vulnerable group. Presenting author email: gmayer@callen-lorde.org
WEPE0347 Impact of an intervention for transgender individuals on lubricant use and utilizations of HIV testing services in Pattaya, Thailand

D. Pewa, Y. Jittakoat, G. Mundy
PSI Thailand, Research, Bangkok, Thailand

Background: Population Services International (PSI) Thailand is in the fourth year of implementing an HIV prevention program with transgender individuals (TGs) in Pattaya, Thailand. The key objective of the program is to reduce the risk of HIV transmission by increasing: consistent condom use; use of water-based lubricants; and, use of HIV testing services at drop-in centers. Activities include interpersonal communication at bars, pubs, and other safe places and HIV testing services at drop-in centers. This study examined associations between program exposure and changes in HIV risk and prevention behaviors.

Methods: Two cross-sectional surveys of TGs in Pattaya were conducted in 2006 (N=400) and 2009 (N=300). Both surveys used Respondent Driven Sampling (RDS) to recruit study participants. Respondents were self-reported, sexually active TGs, aged 15 to 35, living and working in Pattaya. Data were collected on key HIV behavioral risk indicators and indicators to assess individual opportunity, ability, and motivation to adopt safer sex behaviors. Multivariate analyses (using SPSS) were performed to examine trends and associations between exposure to PSI interventions and key indicators.

Results: Positive changes in key indicators were observed between 2006 and 2009, with exposure to PSI interventions having a positive association with lubricant use and utilization of HIV testing services. In 2009, thirty-seven percent of TGs reported exposure to PSI intervention in the 3 months prior to the survey. Exposure to the intervention was significantly associated with: lower usage of oil-based lubricants (p<.001); positive attitudes toward using water-based lubricants (p<.001); and, higher use of HIV testing services in the past 3 months (p<.001).

Conclusions: Clear and direct messages about the benefits of using water-based lubricants and the dangers of using oil-based lubricants can be effective and should be maintained and integrated into condom promotion. Safer sex messages should also be provided during HIV counseling sessions.

Presenting author email: duangta@psithailand.org

WEPE0348 "Tal Cual" - “as I am” - provide friendly health services for trans population in Dominican Republic

Y. Peña Caball1, F.B. Santaya Taylor2, R. Castillo3, D.E. Benitez Polanco1, L.E. Riveria1
‘Centro de Orientacion e Investigacion Integral-COIN, Social Marketing/Youth, Santo Domingo Este, Dominican Republic, ’Centro de Orientacion e Investigacion Integral-COIN, Projects, Santo Domingo, Dominican Republic, ’Centro de Orientacion e Investigacion Integral-COIN, Coordination, Santo Domingo, Dominican Republic, 'YurWorld - Youth in the Real World, Education, Santo Domingo, Dominican Republic, 'YurWorld - Young in the Real World, Coordination, Santo Domingo, Dominican Republic

Issues: Transgender persons face multiple social and institutional barriers to competent mental and physical healthcare. High rates of STIs and HIV, an array of specific healthcare needs and a set of life challenges that often contribute to substance abuse and detrimental mental health, makes this population central to any discussion on rights-based access to healthcare. With an HIV prevalence rate of over 30% (Encuesta Delta 2004) in the Dominican Republic this subpopulation represents a major underserved high risk group.

Description: The "Tal Cual" project has collected basic situational data and offered a healthcare response designed to increase the number of transgender persons accessing services and receiving quality sexual and reproductive healthcare in a safe and supportive environment. It provides training and sensitization for providers through an internship programme where public sector healthcare givers learn culturally appropriate and competent care to transgender individuals.

Lessons learned:
- A focus on primary care is less stigmatizing than an approach stressing STIs and HIV.
- Medical management of hormonal therapy is safer, builds self-esteem and improves ARV adherence.
- A youth clinic setting provides a tolerant environment with ample opportunities for diverse youth to learn about each other.
- A mobile clinic with peer health promoters is an excellent outreach strategy for reaching this group.

Next steps: Government authorities are obligated to provide health services to all people including marginalized groups as part of the national commitments made to basic human rights for all citizens. The community based "Tal Cual" project shows that it is possible to take this responsibility seriously and recognizes that the state does not often passes the “know how” to work effectively with these groups.

Presenting author email: yayarapc@hotmail.com

WEPE0349 The first attention center for transgender population in Mexico City: experiences and challenges for transgender health attention

R. Lara Escopi1, F.J. Arellano-Ayala1
Clinica Especializada en HIV/AIDS Condesa (Mexico City AIDS Program), Transgender Unit, Mexico City, Mexico, Clinica Especializada en HIV/AIDS Condesa (Mexico City AIDS Program), Prevention Department, Mexico City, Mexico

Issues: In Mexico the transgender population is one of the most stigmatized and discriminated population. Transgender people have higher HIV and STI's prevalence and other important health issues, as the injection of substances and the hormonal therapy without medical supervision. On other hand they are exposed to the authorities extortion and the violence in the streets; there is not an estimation or census about the number of transgender persons in the city.

Description: With the aim to improve the access to health attention for transgender persons, in July 2009 the Mexico City AIDS Program launched the first center for health attention for transgender population in Mexico City and with the secondary objective to estimate the number of transgender persons in the city. Currently, has attended more than 132 transgender persons (before attended just 122 transgender persons between 15 to 60 years old (age average: 31 years old), most of them are HIV-positive (82 of 132) and 110 (110 of 132) receive hormonal therapy. One important find, is that more than 80% of this sample use the hormonal therapy without medical supervision with important implications for their health. Other relevant health issue is the important number of them (60%) who uses mineral and industrial oil with the purpose to feminize their apparel.

Lessons learned: Sensible and specialized personnel in hormonal therapy, gender and sexology is crucial for this population. It is also important to provide psychological and psychiatrically supervision during all the complex process of sex-reassignment. Is important too, to provide to this population the knowledge and the skills to avoid some harmful behaviors. NGOs and transgender community was involved at the early steps of the project, to give counsel and recruiting people.

Next steps: To enlarge the medical attention with more personnel and increase the psychological and psychiatrically support.

Presenting author email: rijares@yahoo.com.mx

WEPE0350 Barriers to health services by transgender women caught on tape!

F. De Gregori1, M. Romero1, L. Paola2, R. Mayorga2, M. Talarico3, C. Nunez1, R. Mazin4, W. Hegel2
Independent, Lima, Peru, 'REELACTRANS, Buenos Aires, Argentina, 'PAHO / OMS, Washington, United States, 'UNAIDS, Buenos Aires, Argentina, 'UNDP, Panama City, Panama, 'UNAIDS, Panama City, Panama

Issues: There is little awareness of the barriers faced by transgender women to access health and other services in Latin America. Health services often lack personnel with expertise in the unique health conditions of this population, which include changes in their bodies through the use of hormones and silicone. STIs, substance abuse and depression as a result of stigma and discrimination are other frequently unaddressed health conditions. Access to health services is significantly hampered by the practice to call transgender women by their birth (male) name in health settings, which is often accompanied by disrespectful remarks.

These barriers, combined with widespread violence and poor access to justice, education and other services, makes this population very vulnerable to HIV, with prevalence ranging from 21.5% to 40% in Latin America in the last decade.

Description: Civil society, international organizations (WHO, UNDP and UNAIDS) and national governments of Latin America partnered to produce a 90-minutes documentary, Translatina, as part of an advocacy initiative to give visibility to the barriers faced by transgender women to access health, education, justice and other services and to promote legislative, policy and programmatic reforms to remove these barriers. Concluded in November 2009, the documentary contains testimonies of representatives of transgender organizations from 15 countries and includes disturbing images of exclusion and violence.

Lessons learned: Translatina is an excellent tool for advocacy and sensitization of health care providers. Since it is not fictional it serves as an illustration of real effects of the exclusion of transgender women.

Next steps: Translatina will be launched during highly visible events and used as a guide to reorient and expand health care for this population in Latin American countries. Copies for other regions (with English, French, Italian and possibly German subtitles) can be obtained from sid@paho.org

Presenting author email: lyra@paho.org
WEPE0351
An integrated response to the protection of migrant populations

H. Chen

International Federation of Red Cross and Red Crescent Societies Regional Delegation for East Asia, Regional Health, Beijing, China

Issues: Migration of unskilled labour in China involves the largest movement of people in modern history. This movement leads to vulnerability because of poor working and living conditions and migrants limited education. Mobility contributes to behaviours due to lack of information to enable them to protect themselves and their partners. In 2008, 17.5% of HIV/AIDS cases in China were attributed to migrants. It is an area of great concern for the Red Cross Society of China (RCRC) because of its work at community level, to provide a commitment of humanitarian assistance, and to address the needs and vulnerability of migrants.

Description: Targeted campaigns have been conducted to increase migrants disease prevention awareness including train activities by Red Cross volunteers and train staff, through a radio channel. These programmes successfully provide education on safe sex and promote the use of condoms. Livelihood trainings, organizing family visits, peer education and self care activities aim to reduce loneliness and help them to learn how to live with hope and inspiration. Promotion and referral to VCT are essential and based on needs and best interests of migrants.

Lessons learned: It is important to work with community leaders to gain the trust of migrant workers. Involvement of factory owners as gatekeepers is a key aspect of this intervention. IEC needs to be developed for illiteracy audiences in appropriate languages. Arranging a variety of artistic activities enjoyed by migrants was a good way to link to migrants. It is essential to have a relationship with VCT and other services for effective referrals.

Next steps: HIV prevention activities will be coordinated with the involvement of multiple departments to best utilize local resources. Knowledge sharing on new laws and policies will be given to promote the rights and interests of migrants.

Presenting author email: hong.chen@ifrc.org

WEPE0352
KAP survey on HIV/AIDS and STI among male rural mobile workers in Jiangxi province, China

W. He*, M. Yin*, S. Zhu

*Department of Health Promotion, Jiangxi Provincial Center for Disease Control and Prevention, Nanchang, China

Issues: to explore effective ways of preventing HIV/AIDS among mobile workers through survey on needs of HIV/AIDS knowledge and information, attitude and practice among male mobile rural workers. Description: using stratified cluster sampling method, surveyed a sample of 1021 mobile rural workers in three cities of Nanchang, Jiujiang and Ganzhou. Data was collected using a standard questionnaire and analyzed using SPSS.

Lessons learned: Awareness of HIV/AIDS and STI knowledge among male mobile rural workers is not high. There were 79% and 56.26% of respondents have correct knowledge of HIV/AIDS and STI respectively. In recent 3 months, 58.8% of the respondents said they had sex with regular partners, 19.5% with casual partners and 12.06% with men, and condom use rate accordingly were 10.79%, 8.21% and 14.8% respectively. Up to 93.68% of the respondents express they need HIV/AIDS and STI knowledge and education. Main channels of obtaining HIV/AIDS and STI information include television (70.55%), newspaper and magazine (40.12%), radio (20.16%), internet (15.81%), poster (10.67%), performance (9.58%), and friends (4.74%). Significant difference was found in main information channels including radio and poster among male mobile rural workers in three cities (x^2=15.48 P(0.01), x^2=8.696 P(0.01)). Significant difference also existed between those working on construction and those on service industry (P(0.01)).

Next steps: Risky behaviors widely exist among male mobile rural workers, and it is urgent to carry out targeted education and interventions among them. Different ways of education and intervention should be employed according to local economic situation, and according to mobile workers' occupations.

Presenting author email: jnyjc@163.com

WEPE0353
Migrant social networks in an innovative prevention programme

L. Jaramillo1, G. Croft2, M. Ralli1

1Centro di Psicologia Transculturale, Turin, Italy, 2Ospedale Amedeo di Savoia, Turin, Italy


Description:
1) “Community leaders & health” - training course. Themes: HIV/AIDS, sanitary domains in which research has demonstrated migrants present more difficulties, “social networks”. Participants: 40 people from 17 different countries.
2) Implementation of a prevention campaign within migrant communities liv-
WEPE0355
Evaluation of a condom promotion program among Bataye residents in the Dominican Republic, 2006-2008
B. Nieto-andrade1, J. Hasbún1, C. Barrington1, L. Almiré1, A. Göttert2, C. Smith3,4, G. Arndt5
1Population Services International, Guatemala, Guatemala, 2External Consultant, Santo Domingo, Dominican Republic, 3University of North Carolina, Gillings School of Global Public Health, Chapel Hill, United States, 4Population Services International, Santo Domingo, Dominican Republic

Background: PSI-Dominican Republic is conducting a condom promotion program in impoverished Haitian immigrant settlements (Bataye) with higher HIV-prevalence (3.2%) than at the national level (0.8%) (DHSS, 2007). The program is based on collaboration with partner NGO’s.

Methods: To evaluate the impact of its interventions, PSI conducted two cross-sectional behavioral surveys with 20-49 years old residents of Bataye, using time-location sampling, in 2006(n=1,595) and 2008(n=1,487). Controlling for socio-demographics factors, Uninova Analysis was conducted to assess changes over time and programmatic impact. Values are reported using mean scores from Likert scales (ranging from 1=totally disagree to 4=totally agree) for percentages.

Results: Between 2006-2008 condom use at last sex increased with casual partners from 81.0% to 93.6%, p< 0.01, and with commercial partners from 81.6% to 96.6%, p< 0.01. The increased condom use with commercial partners is attributable to PSI interventions: people exposed to PSI reported significantly higher levels of condom use than those non-exposed. The program also showed impact on: self-efficacy to use condoms (mean value changed significantly from 3.07 to 3.19, p< 0.01); knowledge on correct use of condoms (2.87 to 3.12, p< 0.001); support from friends to talk about condom use (2.45 to 2.88, p< 0.001); social norms on having only one partner (1.98 to 2.80, p< 0.001); having condoms at home (1.73 to 2.37, p< 0.001); and having received free condoms last year (39.6% to 69.3%, p< 0.001).

Conclusions: Between 2006-2008 PSI’s collaborative program with partner NGOs increased condom use at last sex with commercial partners among residents of Bataye, as well as several other determinants of condom use. Given the high levels of condom use at last sex with casual and commercial partners in 2009 (over 90%), future interventions should emphasize maintaining that level and promoting consistent condom use with all partners, as well as determinants of condom use that could support sustainability of these changes. 

Presenting author email: labreu@psidr.org.do

WEPE0356
KAP toward HIV/AIDS and correlated factors among migrant workers in Thailand
P. Uthith1, V. Jirapaet1, R. Thato1, N. Jitthai2
1Chulalongkorn University, Faculty of Nursing, Pathumwan, Thailand, 2Population Services International, Guatemala, Guatemala.

Background: Migrant workers are vulnerable to HIV infection due to social and legal factors that limit their access to social and health services. The International Organization for Migration (IOM) in partnership with the Thai Ministry of Public Health (MOPH) has initiated the MOPH-IOM Migrant Health Program (MHP) to improve migrants’ health condition in Thailand. A cross-sectional survey was undertaken as part of the program evaluation in three provinces: Samutsakorn, Ranong and Pang Nga. The study objectives are: 1) to determine knowledge (K), attitudes (A) and practices (P) on HIV/AIDS among migrants; and 2) to explore demographic and migration factors associated with HIV/AIDS among migrants.

Methods: A cross-sectional survey was conducted using the Thai-Burmese questionnaire. From power analysis, 1,214 migrants participated in the MEP in the three target provinces were preselected to conduct surveys during November 2008 to January 2009.

Results: Migrants were mostly Burmese (98%), male (52%), married (69%), unskilled labour (72%); and had formal education (92%), no work permit (50%), no health insurance (60%), correct knowledge and positive attitude on HIV/AIDS, while work permit was correlated with attitude component (x= 4.03, 3.44 and 8.37, p< 0.05). Female migrants and migrants with formal education had higher level of knowledge (x=2.965 and 1.970, p< 0.05); those with work permit and health insurance had higher level of both knowledge and attitude (x=3.15 and 3.27, p< 0.05).

Conclusions: Continuing efforts to maintain good KAP on HIV/AIDS prevention among most migrants in Thailand is essential. To increase KAP on HIV/AIDS among migrant workers who are low education, no work permit and no health insurance, an effective and specific health education program for these particular migrants is needed.

Presenting author email: penpaktr_uthith@yahoo.com

WEPE0357
Targeted approaches to primary and secondary HIV prevention: a review of research relevant to the development and implementation of culturally appropriate interventions for immigrants living in high-income countries
T. McMahon1, P. Ward2, J. Irmer3,4
1Multicultural HIV/AIDS and Hepatitis C Service, Sydney, Australia, 2Flinders University, Discipline of Public Health, Adelaide, Australia, 3University of New South Wales, National Centre in HIV Social Research, Sydney, Australia, 4University of KwaZulu-Natal South Africa, Africa Centre for Health and Population Studies, Mtubatuba, South Africa.

Background: More than 95% of global HIV infections occur in developing and middle-income countries. Immigrants from these countries now make up a significant proportion of people living with HIV in many high-income countries. There is growing evidence of disparities in HIV health outcomes among these immigrants, differences in social and cultural understandings of HIV and differences in dominant modes of transmission, when compared to destination country populations. A key gap in the evidence base includes learning from past interventions to guide new, or strengthen existing, culturally appropriate models of HIV prevention among these immigrants.

Methods: The research, a realist review of evidence, examined the mechanisms (theories) underpinning cultural appropriate HIV prevention with immigrants. Seven preliminary mechanisms -‘authenticity’, ‘understanding’, ‘confidence’, ‘specificity’, ‘embedding’, ‘endorsement’ and ‘framing’ were generated from a scan of the literature. These mechanisms were then tested against peer-reviewed and grey evidence found in systematic searches in major databases. Two types of studies contributed to the review; qualitative and community-level intervention studies and qualitative and descriptive studies of immigrants’ views on HIV/AIDS prevention.

Results: 34 intervention studies primarily from the USA, Israel and The Netherlands and 39 qualitative studies mostly from the USA. Pairs of evidence met the inclusion criteria for analysis and synthesis. The evidence indicated that ‘understanding’, ‘confidence’ and ‘consonance’- relating to language (‘mother tongue’) and cultural values - were pivotal mechanisms in HIV interventions with immigrants. ‘Authenticity’, ‘specificity’ and ‘embedding’ were moderately important mechanisms, with mixed evidence for the role of ‘endorsement’ and ‘framing’.

Conclusions: The research generated practice-based mechanisms (theories) to inform HIV prevention models with, and for, immigrants from developing and middle-income countries. Further research is needed to understand the mechanisms between the mechanisms and their impacts on the effectiveness of interventions. The findings may be particularly relevant to developing national HIV responses for diverse immigrant communities living in high-income countries.

Presenting author email: mcmaht@email.cs.nsw.gov.au

WEPE0358
Program scale-up, increase in safe sex behaviour, decline in incidence of clinically diagnosed sexually transmitted infections (STI) syndromes among truckers, India, 2004-09: a Kavach experience
S. Seth1, I. Singh2
1TCT Foundation, HIV AIDS, Gurgaon, India, 2‘Transport Corporation of India, Gurgaon, India

Issues: Interventions around the world with highly mobile populations has been a challenge. Trucker population, like other highly mobile groups in India, due to their time away from family purported to have increased likelihood of engaging in sexual risk behavior and least accessed to sexually transmitted infection (STI) services. Other health care providers in India aimed unsatisfactory with Kavach experience, a nation-wide scaled-up HIV prevention intervention with truckers in India aimed at reducing unsafe sex behaviours.

Description: The Kavach program was commissioned by Avahan, the India AIDS Initiative of the Bill & Melinda Gates Foundation under the technical and administrative guidance of Transport Corporation of India Foundation (TCF) and Trucker Health Care Initiative, the India AIDS Initiative of the Bill & Melinda Gates Foundation. The program that started in the year 2004 consisted of both static and mobile STI clinics (populately known as ‘Khati Clinics’) with comprehensive counseling and mid-media activities using business practices. Data gathered during intervention through monitoring and information collection (MEC) and multiple rounds of behavioural tracking surveys (BTS) were analysed to measure the program scale-up and impact of the program.

Lessons learned: The results showed that, individuals who were exposed to the program were 2.5 times (95% CI: 1.5-4.1) more likely to have safe sex behaviour among paid partners than those who did not exposed to the program. Further, the clinic data showed a consistent decline in men with reported STI symptoms from 70% in year 2004 to 20% by the end of year 2009 (p< .001). The incidence of Urethral discharge reduced from 554 cases per 1000 clinic attendees in 2004 to 130 cases per 1000 clinic attendees. Similar findings are noted from decline in genital ulcer disease (GUD) herpes.

Next steps: Findings suggest that the combination of strategic STI services and mid-media activities are key in truckers’ interventions. The lessons drawn from Kavach program offers guidance for efficient implementation of HIV prevention interventions with truckers globally.

Presenting author email: shekhar.tcif@tcil.com
WEPE0359

Engaging transport agents in HIV prevention program for long distance truckers
S. Sethyi1, I. Singh2
1TCI Foundation, HIV/AIDS, Gurgaon, India, 2TCI Foundation, Gurgaon, India

Issues: In India, 4.6 percent of the total long distance truckers (LDTs) are currently infected with HIV. More than one in every three long distance truckers report sex with paid partners. Surface transport in India as in many other countries is highly fragmented industry with more than two-third (70 percent) of trucking companies are single truck operators. Huge share of single truck operation limits the options for intervention planning. Transport agents (lo- cally known as ‘brokers’) who play a major role in mediating business between transport owners and clients are provide convenient nucleus for service delivery.

Description: The transport corporation of India foundation (TCIF) started its operations on HIV prevention in the year 2003, but soon realised that the uptake of services remained low at 7 percent until two years from its start. In recognition to increase the uptake of services, the TCIF conducted a census to identify brokers working along the long distance routes in the year 2006. Brokers were initially engaged in program for identifying peers and establishing links with critical civil society organisations. Further brokers were engaged providing access to conduct health camps in partnership with transport company authorities, conducting mid media activities, displaying HIV messages, promoting and managing facilities, truckers, managing drop in centres and sponsoring annual celebratory events.

Lessons learned:
- Involvement of brokers fostered service uptake from 7% in 2006 to 67% in 2008.
- Brokers have fostered community ownership towards bringing program to sustainability.
- Strong interventions including satellite STI clinic services and its synchronisation with mid media and IPC sessions provided a supportive package to work with LDTs.

Next steps: Lessons learnt from TCIF have been adapted by the national HIV communication program in India and discussions are underway on engaging secondary key stakeholders such as brokers for program sustainability.

Presenting author email: shekhar.tcif.com

WEPE0360

HoMBReS-2: results from a pilot small-group HIV prevention intervention for immigrant Latino men
S. Rhodes1, A. Vissman1, K. Hergenrather2, J. Montaño3, C. Miller1, S. Duck4, T. McCoy5, K. Foley6, R. DiClemente7, E. Eng8
1Wake Forest University Health Sciences, Medical Center, Social Sciences and Health Policy, Winston-Salem, United States, 2The George Washington University, Department of Counseling/Human Organizational Studies, Washington, D.C., 3University and Health Policy, Winston-Salem, United States, 4Chatham Social Health Council, Siler City, United States, 5Children’s National Medical Center, Washington, D.C., 6Davidson College, Medical Humanities, Davidson, United States, 7Emory University, Behavioral Science and Health Education, Atlanta, United States, 8University of North Carolina, Chapel Hill, Chapel Hill, United States

Background: Immigrant Latinos in the US are disproportionately affected by HIV. The objective of this study was to refine, implement, and evaluate an intervention to reduce sexual risk among immigrant Latino men using community-based participatory research (CBPR).

Methods: An existing partnership of community members, organizational representatives, and academic researchers developed a multi-session, 6-hour small-group pilot intervention known as: HoMBReS-2. HoMBReS-2 was based on social cognitive theory and empowerment education.

Immigrant Latino men were randomized to either the intervention condition or a cancer-education comparison condition. The interventions were delivered by 4 trained male Latino peer educators from the community.

Results: Of the 141 participants, mean age was 31.27 (range: 18- 66) years. About three-fourths reported being originally from rural Mexico; others reported being from El Salvador, Guatemala and Honduras. Over half reported 6 years of education or fewer. Acculturation was low. Knowledge of HIV transmission and prevention was low. The majority (95.7%) self-identified as heterosexual and 48.2% reported being partnered or married, and of these, 33.3% reported having multiple sexual partners. Nearly 15% reported sex with a female sex worker in the past 3 months.

Three-month follow-up data were collected from 139 (98.5%) participants. Relative to the comparison condition, participants in the intervention reported using condoms more consistently in the past 3 months (unadjusted analysis, 58.5% versus comparison, 31.3%; P< .004). Adjusting baseline behavior, participants in the intervention were more likely to report condom use (adjusted odds ratio=3.3; 95% CI=1.8-9.9; P< .01).

Conclusions: An urgent need exists to address the health issues facing recently arrived immigrants through authentic participatory approaches. Although further research is needed to determine which interventions for Latino men that are developed in partnership with community members, are led by well trained community members, and are culturally congruent can enhance prevention behaviors and may have the potential to reduce transmission.

Presenting author email: schodes@wfubmc.edu

WEPE0361

Assessing and addressing vulnerabilities related to HIV with tailored intervention though SHRR education programming in a population of adolescent asylum seekers in Croatia
S. Rukavin1, V. Stipancic2, M. Drapulić3
1International Federation of Medical Students’ Associations, Executive Board, Ferney-Voltaire, France, 2Zagreb University, School of Medicine, Zagreb, Croatia, 3International Federation of Medical Students’ Associations, Croatia, Ferney-Voltaire, France, University of Zagreb, School of Medicine, Zagreb, Croatia

Issues: Quality assessment of vulnerabilities related to HIV/AIDS, including development and delivery of culturally specific interventions addressing sexual and reproductive health and associated rights using peer education programming within a population of adolescent asylum seekers in Croatia.

Description: Since 2004, when the Croatian asylum law entered into force, 661 persons have applied for asylum. By 2010, Croatia has positively granted asylum to only 2 applicants. In 2009, more than 82 persons from 19 countries have been registered in the open-door type of asylum run by the Croatian Red Cross in the city of Kutina. Population: 56 men, 17 women, 12 children & youth, 6 minors without parental chaperon. Though joined cooperation of 5 medical students (NGO CroMSIC), NGO Challenge & Croatian Red Cross, a specific peer-education program has been implemented to adequately address poor knowledge and awareness related to SHRR for adolescent & youth asylum seekers, including a couple of workshops for general population of the asylum (2007-2009).

Lessons learned: We assessed the basic knowledge on human anatomy of the reproductive system, puberty, hygiene, healthy lifestyles, HIV/STI awareness and prevention knowledge. Because of cultural and language barriers, we could only conduct quality assessment and 6 WPs. Using drawings, theatre techniques and group work proved high effectiveness in knowledge transfer. Access to condoms is a continuous & positive practice implemented by asylum staff members. Gender-based division & working with a same-sex educator was of essential importance, because of deeply rooted cultural barriers.

Next steps: Continuing the program with the support of MTV Staying Alive Foundation will bring new, media related techniques, which will help in bridging encountered barriers. Further work on national policies, implementing the Refugee Convention & European standards; bridging technical problems will have a greater impact on health and education of young asylum seekers in Croatia.

Presenting author email: silva.rukavina@gmail.com

WEPE0362

Sexual abuse history is associated with recent unprotected sex in a diverse sample of sexually active HIV-positive youth
L. J. Koenig1, S. Palis2, S. Chandwani3, K. Hodge3, S. Abramowitz1
1Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, Atlanta, United States, 2New York University School of Medicine, New York, United States, 3Johns Hopkins Bloomberg School of Public Health, Baltimore, United States, 4Children’s National Medical Center, Washington, United States

Background: Adolescents comprise an increasing proportion of HIV/AIDS cases in the United States. To prevent secondary transmission, risk behavior information is needed regarding the factors associated with unprotected sex among HIV-positive youth.

Methods: 166 HIV-positive adolescents (53% female; 72.9% black; 59.6% perinatally infected), ages 13-21 years (mean=16.18 years), receiving care in Washington DC, New York NY, or Baltimore MD, completed a baseline assessment as part of the Adolescent Impact intervention study. In face-to-face or computer-assisted interviews, participants self-reported personal characteristics (age, gender, race, ethnicity, sexual orientation, housing status), sexual behaviors (lifetime [non-forced] or recent [past 3 months] sex; condom use during each recent sex act with up to 3 partners; sexual abuse experienced during childhood or adolescence; lifetime sexual bartering), recent drug or alcohol use, emotional/behavioral problems, HIV knowledge and social support. Data abstracted from medical records included most recent CD4 and viral load, current antiretroviral use, and whether HIV was contracted perinatally or behaviorally.

Results: Of 105 sexually experienced adolescents, 76 (72.4%) reported hav- ing had sex recently, 65 of whom provided data on condom use. Forty-one adolescents (63.1%) reported at least one occasion of unprotected vaginal, anal or oral sex during the past 3 months. In bivariate analyses, recent unprotect- ed sex was more common among those who were older (p<.056), non-heterosexual (p<.055), and who had acquired HIV behaviorally versus perinatally (p<.009). Adjusting for these factors, recent unprotected sex was sig- nificantly associated with sexual abuse during adolescence (Adjusted Odds Ratio [AOR] = 9.61, Confidence Interval [CI] = 1.07, 86.12) as well as greater HIV knowledge (AOR=1.29, CI=1.00, 1.66).

Conclusions: Despite awareness of disease specific knowledge, HIV-positive adolescents engaged in unprotected sex, placing their partners at risk for infection. Effectiveness of secondary prevention programs can be improved by assessing history of sexual abuse and addressing its potential mental and behavioral health impacts.

Presenting author email: lek5@cdc.gov
WEPE0363 Preventing HIV transmission in married and cohabiting HIV-discordant couples in Sub-Saharan Africa through combination prevention

J.K.B. Matovu
Maxwell Smart School of Public Health, Kampala, Uganda

Background: Most new HIV infections in sub-Saharan Africa now occur in married and cohabiting couples, many of whom do not know their HIV serostatus or the status of their partners. Since no intervention can reduce the risk of HIV transmission entirely, a combination of approaches is needed to reduce the risk of HIV transmission within married and cohabiting couples. Combination HIV prevention includes a mix of risk reduction approaches that use current epidemiological and programmatic evidence to target different audiences with simultaneous behavioral, biomedical, social and structural inter-ventions.

Methods: We conducted a selective review of literature using data obtained from papers published between 1991 and 2009. Articles were retrieved by searching PubMed, EMBASE and Google Scholar using the following search words: “HIV-discordant”, “married couples”, “cohabiting couples”, “HIV prevention”, and “sub-Saharan Africa”. Discordant couples were defined as married or cohabiting couples in which one partner is infected with HIV while the other is not. HIV prevention interventions were defined as any interventions targeted at the HIV-discordant couple to reduce HIV transmission to the uninfected partner.

Results: A total of five inter-related HIV prevention interventions with promising efficacy in reducing the risk of HIV transmission in sub-Saharan Africa were identified. These interventions include both behavioral (couples’ counseling, testing & disclosure; condom promotion) and biomedical interventions (provision of antiretroviral treatment to the HIV-infected partner, male circumcision, and treatment of sexually transmitted infections). Available evidence suggests that these interventions can significantly reduce the risk of HIV transmission among HIV-discordant couples in sub-Saharan Africa.

Conclusions: Combination prevention can reduce the tide of the HIV/AIDS epidemic among married and cohabiting couples, a combination of both behavioral and biomedical interventions can help to reduce the risk of HIV transmission in HIV-discordant couples in sub-Saharan Africa.

Presenting author email: jmatoru@shph.org

WEPE0364 “Spare wheels”? A silent phenomenon driving our raging HIV epidemic

M. Akol1, J. Kimani2, A. Musyimi3, F. Nyamibbo3, L. Sharon1, L. Gelmon1
1University of Nairobi, 2University of Manitoba, 3Nairobi, Kenya

Background: Stigma still reigns supreme in our settings leading to non-disclosure of HIV status that hampers adopted prevention strategies. A routine evaluation of patients accessing comprehensive ART and HIV care services at the MCH clinic- Pumwani Hospital revealed that 43% of our clients did not know their partners HIV status. Couple counseling and testing was adopted as part of the ongoing Prevention of Mother to Child Transmission (PMTCT) strategy to address this gap.

Methods: All patients enrolled in our program aged 15 and over, get information on PMTCT, disclosure, partner testing, condom use, family planning, STI treatment and risk behavior reduction (PWP) strategy by a dedicated staff member. All sexually active clients are then encouraged to disclose status and/or bring partner(s) for couple counseling and testing. Those that have difficult partners are given an opportunity to work out a plan and attend couple counseling. The couples are enrolled into an appropriate HIV care and encouraged to join onsite support groups.

Results: Out of 853 index HIV-positive patients reached so far through the PWP strategy, 64% have disclosed and know their partners’ HIV status. The index patients who have disclosed status, 149 are in discordant while 306 are in concordant married or cohabiting couples. About 25% of all individuals have no current sexual partner, while 176 who are sexually active have problems bringing their sexual partners for testing. Out of the 176, 152(66.4%) are women while 24(23.6%) are men. Out of the 152 women, 140(89.8%) are single but have married men as their sexual partners. 126 (80.8%) of these women reported none or minimal use of condoms. 20 of the men are married but 17 of them keep girl friends or spare wheels.

Conclusions: Married men are preferred as sexual partners by single women but unfortunately, use of condoms is low. Empowering spare wheels to negotiate safer sex is overdue and targeted interventions for married men are urgently needed.

Presenting author email: molly_akol@yahoo.com

WEPE0365 Concurrent sexual partnerships among individuals on HAART and the general population in Cape Town, South Africa

B. Maughan-Brown1, A. Venkataraman1, T. Mah1
1University of Cape Town, AIDS and Society Research Unit, Cape Town, South Africa

Background: Concurrent sexual partnerships are believed to be an important factor contributing to the HIV epidemics of southern Africa. Given the large number of people living with HIV, particularly in southern Africa, behavioral change and ‘positive prevention’ has increasingly become an important com-

ponent of a comprehensive approach to the HIV epidemic. The aim of this research was to examine the prevalence of concurrent partnerships among individuals newly on HAART (in the context of other appropriate interventions) in Khayelitsha, South Africa and to compare the prevalence of concurrency and condom use among individuals on HAART and the general population in Cape Town, South Africa.

Methods: We conducted face-to-face survey interviews with a convenience sample of 224 individuals on HAART and a similar sample of the general population.

Results: The prevalence of concurrency was relatively high among both the HAART patients and in the general population (24% and 18% respectively); however, inconsistent condom use was significantly higher among HAART patients compared to the general population (18% versus 20%).

Conclusions: The differences in concurrency and condom use among the study populations’ sexual partners was higher among HAART patients (35% versus 20%). Collectively, 19% of the sexually active HAART participants reported concurrent partnerships or perceived their partner to be involved in concurrent partnerships, and were using condoms inconsistently or not at all.

Presenting author email: tmah@usa.id.gov

WEPE0366 Prevention with positives (PWP): TB screening and counseling for household contacts at Pumwani Hospital Comprehensive Care MCH Clinic

J. Chemutai1, J. Kimani2, M. Akollo3, A. Musyimi1
1University of Nairobi, 2University of Manitoba, 3Nairobi, Kenya

Background: Tuberculosis remains a major cause of morbidity and mortality in Kenya. It is a key opportunistic infection among PLHIV. The incidence of TB worldwide is on the rise attributed to the HIV epidemic. Patients aged 15 - 44years are at higher risk and 48% of those on TB treatment are HIV-positive. Similar trends have been noted in our comprehensive sexual health service. The prevention with positive (PWP) strategy adopted to reach out to household members. Household contacts were counselled at higher risk of TB acquisition especially those who do not know their HIV status.

Methods: The PWP (partner testing, disclosure, condom use, risk behavior reduction, STI screening, FP services) prevention with positives (PWP) strategy was used to address this gap.

Results: In the last 5 months, 67 clients were diagnosed with TB. 102 household members were reached and offered TB and HIV tests. 67(65%) were both HIV and TB positive, 7(6.8%) had both TB and HIV infections, 3(2.9%) had TB but HIV negative, 24(23.5%) had no TB but were HIV-positive and 1(0.99%) had no TB but declined HIV testing. 22 of the 31 HIV infected individuals had never been screened for HIV before and the HIV prevalence among the household contacts 4 times the national average.

Conclusions: TB screening of household contacts is a feasible strategy and recommended. The HIV prevalence among household contacts of PLWHA is high and requires immediate attention.

Presenting author email: ronojudy@yahoo.com

WEPE0367 Results of people living with HIV (PLHIV) - led advocacy and communication to promote prevention with positives in Kenya

L. Chati1, N.J. Otowa1, J. Kimani2, M. Akollo3, A. Musyimi1
1National Empowerment Network of PLHIV in Kenya, Advocacy, Nairobi, Kenya, 2National Empowerment Network of PLHIV in Kenya, Coordination, Nairobi, Kenya

Issues: HIV-prevention approaches in Kenya traditionally have concentrated on reducing HIV-acquisition risk among sexually active individuals. HIV-prevention and safe sex needs of people living with HIV (PLHIV), including those of discordant couples remain unaddressed. This approach hinders the reach and effectiveness of HIV-prevention interventions in high-HIV prevalence areas.

Description: A participatory review of national HIV-prevention approaches by the National Empowerment Network of People living with HIV/AIDS (NEPHAK) confirmed that HIV-prevention interventions and messages are based on the assumption that sex in the face of HIV is a risky venture. PLHIV are advised to avoid sex altogether. The approach ignores the fact that HIV-positive people have a right to a satisfying, safe and healthy sex life. NEPHAK undertook research to understand the education of PLHIV on the importance of prevention of sexual health risks such as pregnancy and sexually transmitted infections, including HIV. PLHIV leaders then engaged in dialogue and advocacy at regional and national levels for an expanded HIV-prevention platform. This has given positive results at community level:

- National AIDS Control Council developed a new strategy of community awareness and an expanded HIV-prevention platform and;
- National AIDS and STIs Control Programme introduced policy and guiding principles for prevention with positives.

Presenting author email: lchati@nephak.org

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

137
WEPE0368
Home-visits to promote health of pregnant families affected by HIV, alcohol, and malnutrition: post-birth results of Philani Plus

I. Le Roux1, M.J. Rotheram3, M. Tomlinson
1ICF Macro International, International Health and Development Division, Calverton, Maryland, United States, 3Ministry of Health and Child Welfare, Harare, Zimbabwe, 2Stellenbosch University, Cape Town, South Africa

Background: Prevention of Maternal To Child Transmission (PMTCT) programs focus on the efficacy of ARV regimes. The prevention needs of Famlies Affected by HIV (FAH) are diverse and include addressing challenges in the first year of life that cross domains of improving health, mental health, social relationships, & reducing transmission. The stigma of HIV reduces families' willingness to embrace prevention.

Methods: A RCT was conducted in 24 matched neighborhoods of 450-600 families in Cape Town, South Africa. We examined the perinatal outcomes associated with 4 prenatal & 4 post-natal home-visits for mothers at risk with HIV, HIV+ low birth weight babies. Mentor Mothers who are community role models are trained to deliver supportive, psychoeducational skills training to pregnant women in a neighborhood setting and evaluated from pregnancy to one week post-birth; 96% were followed to the one-week post-birth assessment.

Results: Most mothers seek care late in pregnancy, indicating the importance of sustained neighborhood-level interventions that promote health & are not HIV-identified. Mobile phones offer optimal strategies for monitoring the quality & fidelity of intervention delivery. Local Mentor Mothers are able to establish strong, enduring bonds, especially with a program that is not identified with HIV, but with nutrition.

Conclusions: Health education programs focus on the efficacy of ARV regimens. The prevention needs of FAH are diverse and include addressing challenges in the first year of life that cross domains of improving health, mental health, social relationships, & reducing transmission. The stigma of HIV reduces families' willingness to embrace prevention.

WEPE0369
Risk-taking behaviors of HIV-positive adults in Zimbabwe: opportunities for prevention

N. Taruberekera1, V. Mistrha2, E. Ganose3, O. Mugurungi3

Background: Historically, HIV prevention efforts have not targeted HIV-positive individuals despite strong evidence that focusing on this population can reduce transmission of the virus. In Zimbabwe, where HIV prevalence is 13.7%, there is a need to assess HIV risk behaviors among HIV-positive adults to inform prevention interventions with this population.

Methods: The study analyzed data collected from a nationally representative sample of the 2005/6 Zimbabwe Demographic and Health Survey. This behavioral survey collected information from 8,883 women and 7,184 men. Blood samples were collected from 70% of all eligible respondents. Analysis in this study was limited to HIV-positive adults, age 15-49 (N=2,219), and used both descriptive and multivariate methods using STATA version 10.

Results: Analysis shows that only 24.4% of HIV-positive adults age 15-49 had been previously tested for HIV and received results. HIV-positive women were more likely than men to have done so (27% of women versus 20% of men). Overall, 80% of HIV-positive adults were sexually active in the last year. 42% of all HIV-positive adults reported three or more lifetime sexual partners and 17% reported having had sex with a non-spousal partner in the past year. Despite high levels of sexual activity among HIV-positive adults, levels of condom use were low. Among those who had sex in the past year, 63% of last sexual acts were unprotected. Among HIV-positive adults who had sex with a non-spousal partner, less than half used condoms. Only 14% of HIV-positive men reported consistent condom use.

Conclusions: These findings suggest that HIV prevention efforts in Zimbabwe need to focus on changing behaviors among individuals living with HIV. Complacency among promoting condom use among partners should not tailor unique messages for individuals who are HIV-positive. Access to post-exposure prophylaxis and testing should be scaled up to target individuals at risk for HIV infection.

WEPE0370
PLHIV prevention need centered positive prevention approach

R. Zhang
Red Cross Society of China, Headquarters, Project Management Office, Beijing, China

Issues: In China, positive prevention has been mainly regarded as behavioural change intervention for PLHIV in order to reduce transmission of HIV to non-infected populations. During which, PLHIV were taught to practice safe behaviours, so that they will not infect others and therefore, could be considered as “socially responsible patients”. However, besides suffering from stigma and discrimination, this approach of “responsible for others and do not further spread the virus” causes resistance from PLHIV, as many of whom are considering themselves as the victims of at least PLHIV’s “irresponsible behaviours”, then why will they be responsible to others?

Description: Based on above findings through in-depth interview with PLHIV volunteers, Red Cross Society of China piloted a new PLHIV prevention need centered approach in existing services to PLHIV. For instance, promote condom use in ARV treatment training for PLHIV and shape the message into “practice safe sex, in order to protect your ARV treatment result, and prevent yourself being infected by another type of HIV or other sexually transmitted diseases, which harms your current health status”. The objective of this approach is to change the attitude of PLHIV from “practice safe behaviours for others” to “practice safe behaviours for my own prevention needs”, and empower PLHIV to do so for the benefit of themselves. This approach has been better received by PLHIV for its friendliness and consideration of the needs of PLHIV.

Lessons learned: For PLHIV, the center of positive prevention is not the prevention need of non-infected people, but the prevention need of PLHIV themselves.

Next steps: Further improve the messages within this approach by working with PLHIV groups and expand this concept into other services for PLHIV.

Presenting author email: rzhanger@redcross.org.cn

WEPE0371
Prevention with positives (PWP) in Thailand: key success factor for scaling up in health setting

P. Yukatana
Bureau of AIDS, TB and STIs, Department of Disease Control, Nonthaburi, Thailand

Issues: The HIV transmission in serodiscordant couples share 40% of AIDS cases in Thailand. To accelerate efforts to reduce the new HIV infection, PWP program have been launched in health care setting.

Conclusions: Thai PWP program can reduce transmission of the virus. In Zimbabwe, where HIV prevalence is 13.7%, there is a need to assess HIV risk behaviors among HIV-positive adults to inform prevention interventions with this population.

Lessons learned: 1) PWP service should be setting in HIV clinic which PWHA frequently follow. 2) Trained health officer must have knowledge and capability to transfer knowledge of 6 prevention strategies by proving short messages for easy understanding. 3) Must have both internal and external followed up and referral system such as STIs treatment, PMTCT and counseling services 4) PWHA network is able to promote and monitor the prevention in infected by using the capable of network’s strength. 5) Manual and tool kits should be provided. 6) The PWP service’s format must apply for routine service and client’s context. 7) Must have the target and monitoring indicator for quality improvement.

Next steps: PWP service should be monitored and continuing supported for both technical and policy support.

WEPE0372
Integrating and scaling up prevention with positives interventions in clinical settings: the Kenyan experience

T. Marwa, A. Gitoke, I. Malonza, C. Ayuyo, P. Lynam
T. Marwa, A. Gitoke, I. Malonza, C. Ayuyo, P. Lynam - an affiliate of Johns Hopkins University, HIV/AIDS, Nairobi, Kenya

Issues: Kenya has rapidly expanded the provision of HIV care and treatment services: over 300,000 people are on treatment countrywide. However, many HIV-infected persons are not being encouraged to reduce HIV transmission despite frequent contact with the health system.

Description: The Prevention with Positives (PwP) approach equips health care providers with knowledge and skills to deliver HIV prevention messages to clients attending HIV comprehensive care clinics (CCCs). The key messages include topics on partner testing, family planning, and voluntary counseling and testing. The emphasis is on reducing condom use, alcohol and substance abuse. Jhpiego, in collaboration with the Kenya Ministry of Health, implemented a PwP pilot program. The focus was service providers based at high-volume health facilities at provincial levels.
and district level. A total of 420 service providers (nurses, clinical officers, counselors) underwent a five-day PwP training course, 60 of whom were offered the NIMH training 12 weeks later. The supervision results revealed that in 80% of the 33 health facilities visited, providers were offering all key PwP messages. In addition, 93% of trained providers were comfortable discussing PwP messages with their HIV-positive patients and 91% offered condoms to every CCC client. Effective referrals to other services improved by 68% in the 14 health facilities where data was available.

Lessons learned:

- It is feasible to integrate PwP services into HIV care and treatment services in high volume health facilities in Kenya. Trained service providers were comfortable in discussing PwP messages with their HIV-positive clients and an added benefit was that referrals to other services were greatly improved.

Next steps:
The program will assess the impact of the PwP program on behavior change by following HIV patients who have been recruited by the program.

The Kenyan Ministry of Health plans to scale up the PwP interventions to all HIV clinics countrywide.

Presenting author email: agohole@jhpiego.net

WEPE0373

IDeX client home based counseling and testing (HBCT) service for effective approach in identification of more people living with HIV

D. Mwakangalu

Family Health International, Kenya, Mombasa, Kenya

Background:
Counseling and testing is the main gateway to prevention, treatment, and care and support for HIV and AIDS. Identifying people living with HIV (PLHIV) and counseling them with prevention efforts can potentially reduce the new number of infections. IDeX aims to increase access to HIV counseling and testing (HCT) services among family members in households with PLHIV.

Methods:
The project was implemented in four health facilities in Coast Province, Kenya, through the USAID-supported AIDS Population Health and Integrated Assistance (APIHA II) program. HIV-positive clients who had not disclosed their status to their partners, and did not know their partners’ and children’s HIV status, were recruited as index cases from the HIV comprehensive centers in the facilities. They were offered HCT services for their family members at home. Service data were collected on daily activity forms and analyzed on monthly summary forms.

Results:

- Of the 1,459 (606 < 14yrs, 853 > 14yrs) individuals tested from 643 index client households from February to September 2009, 178 tested HIV positive (12% HIV+ for males and 13% for females above 14yrs, and 6% average for below 14 years. Ninety-six couples were counseled and disclosed their status to their partners, and did not know their partners’ and children’s HIV status, were recruited as index cases from the HIV comprehensive centers in the facilities. They were offered HCT services for their family members at home. Service data were collected on daily activity forms and analyzed on monthly summary forms.

Conclusion and recommendations:

- The HIV prevalence and discordance rates were much higher among home-tested family members of index clients than among the general population who accessed testing in voluntary and family-based provider-initiated settings. The IDeX model also increases access to HIV testing for children, which translates to increased enrollment in care and treatment and increased partner/family disclosure. This PLHIV identification approach with targeted prevention interventions can lead to reduction of new infections.

Presenting author email: dmwakangalu@fhi301.org

WEPE0374

Advocacy for reducing HIV/AIDS related stigma and discrimination

S. Dahal

Nepal Red Cross Society, Junior/Youth Red Cross, Kathmandu, Nepal

Issues:
Stigma and discrimination has played a significant role in the duration of life for PLHIV in Nepal. Many PLHIV have lost their lives due to the self-confidence, community and family support. They have been facing living problem in their own communities; some children of PLHIV are not even accepted for school enrollment.

Description:
Keeping that fact, Nepal Red Cross Society has been working to reduce stigma and discrimination attached with PLHIV at communities through advocacy sessions, life story sharing and social psycho support for PLHIV since 1994.

On advocacy sessions, firstly, the gatekeepers of schools and community like local leaders, teachers, school management committees, noted persons, execu-
vatives of community groups will be given education that no one should stigmatize or discriminate PLHIV. Similarly, they are oriented HIV/AIDS and mobilization in various awareness activities at communities. Programs should create such an environment which encourages people communities to assist PLHIV and solve HIV/AIDS related problems.

Lessons learned:

- Such kinds of advocacy sessions contribute to reduce stop the stigma and discrimination in schools, colleges and health facilities so that they can provide non-discriminatory and non-stigmatized life at their own community. Similarly, community people become involved in the activities of PLHIV, they will become empowered and encouraged; additionally, their self-confidence and family support increases as members become more learned about HIV/AIDS. They will get help from local PLHIV to start a new life with their families and to access medical and psychosocial support.

Next steps:
Involvement of PLHIV with the support of community people will reduce stigma and discrimination from both families; society and self-family discrimination would be normalized. For designing community-based awareness and testing prevention programs, it is active activities for all.

Presenting author email: satoshdh@gmail.com

WEPE0375

Persistent HIV transmission risk behaviors among HIV-serodiscordant couples in South Brazil

M. P. Paginella1, L. R. Motta2, S. K. Katol3, R. D. Sperhacke1, C. D. Pitcher1, O. M. Bacino1, T. M. Hecht1, R. S. Souza1

1University of Caxias do Sul, HIV/AIDS Research Laboratory, Caxias do Sul, Brazil, 2Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, Brazil, 3University of California at San Francisco, San Francisco, United States

Background:
The rate of HIV infection is increasing in the South region of Brazil, despite wide availability of free HIV care. We wished to assess HIV transmission risk behaviors in couples where one partner already knew he or she was HIV+ (HIV serodiscordant couples).

Methods:
The AMPLIAR project enrolls individuals with previously HIV- or unknown status at the time they seek routine HIV voluntary counseling in South Brazil. The study collects information concerning clinical and sociodemographic factors, HIV transmission risk behavior and sexual partnerships from all subjects. Testing for HIV infection includes staging of infections as ‘recent’ (< 6 months) using the BED capture EIA.

Results:

- Among 3591 HIV testers studied during 2006-2009, we identified 489 (14%) who were in HIV-serodiscordant couples with only HIV/Unknown partnerships. The mean rate of sexual intercourse reported within HIV discordant couples (4.7 acts/2 weeks) was slightly greater than that reported by other participants (3.0 acts/2 weeks; p=.002), but the discordant couples reported lower rates of condom use, with 34.6% reporting inconsistent use vs. 45.5% reporting no condom use within the partnership. Main reasons for not using condoms in discordant couples included “trust in the partner” (36%), “don’t like to use it” (30%), “for me its not a risk” (28%) and “I am being faithful to my partner” (23%).

Conclusion:

- Despite the broad availability of HIV care and prevention services in Brazil, individuals in HIV-discordant partnerships are still engaging in frequent HIV transmission risk behaviors and to transmit HIV. Reasons for not using condoms are related to interpersonal dynamics, lack of trust in the partner, and HIV as not being a risk.

WEPE0376

Project enhance: a randomized controlled trial of a novel HIV prevention intervention for sexual risk-taking HIV-infected men who have sex with men in a community setting

K. Mayer1,2, M. Skeer3,4, C. O’Cleirigh3,5, S. Safren3,5

1University of Caxias do Sul, HIV/AIDS Research Laboratory, Caxias do Sul, Brazil, 2Brown Medical School/Miriam Hospital, Infectious Diseaes, Providence, United States, 3The Fenway Institute, Fenway Community Health, Boston, United States, 4University of California at San Francisco, San Francisco, United States, 5University of California at San Francisco, San Francisco, United States

Background:
Men who have sex with men (MSM) who have sex with men (MSM), there are few secondary prevention interventions for this population. Linking prevention with HIV care is an opportunity to efficiently identify and decrease HIV-transmission risk behavior in this population.

Methods:
Two-hundred-and-one HIV-infected MSM who reported unprotected sex in the past 6 months were recruited in to the study in a Boston community health center. They were randomized to receive either treatment-as-usual or an intervention provided by the iMB and delivered by medical social workers. The intervention included six sessions, three quarterly “booster” sessions, and proactive case management for any unmet psychosocial needs. Demographic, sexual risk, and mental health data were collected at baseline and at 3, 6, 9 and 12-months. Treatment outcome and moderation analyses with depression were conducted using longitudinal residual bias correction.

Results:

- Overall the course of the study, the risk of sero-discordant unprotected and intercourse (SUIA) was significantly reduced among all participants (IRR: 0.88; 95% CI: 0.82-0.95; p<.0001). However, the reduction in SUIA was not significantly different between the intervention and control conditions (p=.846). Interestingly, depressed men in the intervention condition reported significant reductions in SUIA over the course of the study compared to depressed men in the control condition and non-depressed men in either the intervention or control conditions (p<.001).

Conclusion:

- Integrating HIV-prevention with clinical care for high-risk HIV-infected MSM was feasible and acceptable, but participants in both the intervention and control conditions experienced decreases in SUIA. Research design is needed to delineate the contribution of specific intervention components vs. different effects of study-related interviews and counseling on risk. The exploratory analysis suggests that iMB interventions integrating prevention care management in primary care settings may be particularly beneficial for patients with co-occurring depression.

Presenting author email: kenneth_mayer@brown.edu
WEPE0377

Behaviour change counseling of suspects with acute HIV infection identified by P24 antigen test offered at VCT centers in Zimbabwe

S. Gudzueya, K. Hatzold, M. Chommie
Population Services International Zimbabwe, Harare, Zimbabwe

Issues: Acute HIV infection (AHI) is the 3-4 week period between HIV acquisition and antibody (AB) development. During AHI, transmission risk is increased due to high viral load in blood and genital secretions. Unaware of their HIV status and infectivity persons with AHI might continue with sexual risk behavior. Interventions targeting AHI could have significant impact on HIV transmission. Low cost, HIV rapid test kits detecting both HIVAB and P24 antigen (P24Ag) became available recently and were introduced at Zimbabwe’s network of HIV testing and Counseling (HTC) centers, managed by Population Services International (PSI).

Description: PSI’s HTC network reaches over 35,000 Zimbabweans each month, contributing to about 40% of all people tested in the country. The program also targets more at risk population groups (MARPS), such migrant workers and general civilian population. Purpose of present study was to develop an effective HIV rapid tests able to detect P24Ag and HIVAB. Counseling guidelines were developed enabling counselors to provide the right messages on AHI, infectivity and reduction in sexual risk behavior to clients with AHI. Of 36, 492 clients tested with the new test six (0.02%) had p24 antigen positive results, whilst the clients were given HIVAB test. Of 150 clients received specific risk reduction counseling and condoms; and were advised to return for re-testing with their sexual partner(s) within one month.

Lessons learned: A low percentage of clients visiting HTC centers in Zimbabwe presenting with AHI. Nevertheless, because of the high potential HIV prevention benefits and the relatively low additional costs, using combined AgP24 and HIVAB tests should be recommended especially at HTC facilities reaching MARPS.

Next steps: Use of the combined AgP24 and HIVAB tests might be expanded to other HTC service providers in the public sector in Zimbabwe and is recommended for use with testing algorithms in other countries in the region.

Presenting author email: sgudzueya@psi-zim.co.zw

WEPE0378

Opções para a saúde: the development of a peer-delivered risk reduction counseling program for PLWH in the Mozambican Armed Defense Forces (FADM)

D. Comman1, C. Reddingi, K. Sile2, Z. Daddi4
1University of Connecticut, Center for Health, Intervention, and Prevention, Storrs, United States, 2Maputo Military Day Hospital, Maputo, Mozambique

Background: HIV prevalence rates among members of Mozambican Armed Defense Forces have been estimated to be as high as 39%, 2 to 5 times higher than general civilian population. Purpose of present study was to develop an effective HIV risk reduction counseling program for HIV-infected FADM soldiers in clinical care.

Methods: 37 HIV+ patients and 8 medical staff from military hospital in Mozambique participated in 7 focus groups about prevalence of HIV risk behav- iors, barriers to safer sex, and strategies for helping PLWH with safer sex. 67 HIV+ men and 83 HIV+ women completed survey of HIV risk behavior.

Results: Focus groups and survey findings indicated that majority of PLWH were sexually active and many did not use condoms. Reasons for risky sex included informational barriers (belief that Europeans are trying to kill Africans by contaminating condoms with HIV), motivational barriers (negative attitudes towards condoms and fear of abuse/abandonment if one insists on condom use), and behavioral skills barriers (incorrect condom use and limited ability to negotiate safer sex). Providers and patients suggested HIV+ peers be trained to do risk reduction counseling with patients. 85% of 150 PLWH that completed surveys indicated being sexually active in past month (49 men, 65 women). 28 participants (19%) reported at least one risk event in past month; 26 participants (13%) reported unprotected sex with HIV-negative or unknown status partners. 57% of participants had disclosed HIV status to other. 49 men, 37 women.

Conclusions: Based on focus group and survey findings, 5-day training program was developed to teach peers how to do risk reduction counseling with HIV+ patients in clinical care. Training program teaches peers counseling skills and strategies for addressing informational, motivational, and behavioral skills barriers that make it challenging for PLWH in FADM to engage in safer sex. Program is currently being evaluated for feasibility, fidelity, and effectiveness.

Presenting author email: deborah.comman@ucconn.edu

Prevention for indigenous populations

WEPE0379-WEPE0385

WEPE0379

Kaupapa Māori (ways Māori) inform the co-construction of a community education HIV/AIDS intervention/prevention programme for rangatahi Māori wahine (young Māori women)

L.M. Hayes
University of Waikato, Sport & Leisure Studies, Hamilton, New Zealand, 1YWCA of Aotearoa New Zealand, Wellington, New Zealand

Issues: Education, It is acknowledged, is one of the most effective inter-vention strategies in the reduction of HIV & AIDS transmission. There are many evidence-based and community- initiated educational HIV programmes developed worldwide to prevent HIV transmission amongst diversely differ-ent populations. Anecdotal and evaluative research suggests many of these programmes have made a difference in the communities within which they occur. However, at AIDS 2008, it was argued conventional HIV prevention programmes have often been ineffective in indigenous communities, as these programmes did not take into account particular community’s cultures, contexts and vulnerabilities. In Aotearoa New Zealand rangatahi wahi Māori have been identified as one of the most vulnerable groups of HIV infection (Turia, 2009).

Description: This paper explores the key pedagogical approaches, strate-gies and principles utilised in evidence-based research HIV & AIDS education programmes and identifies those specific principles that could be included in a community initiative to provide an HIV intervention/prevention education programme for rangatahi Māori wahine within a Kaupapa Māori (Māori world-view) framework. A kaupapa Māori approach embodies such principles and values as tikanga Māori (customs/protocols), to ora (wellbeing); toiora (healthy lifestyles); ako (reciprocity), whakawhanaungatanga (relationships) and rangatiratanga (sovereignty, self-determination).

Lessons learned: Following a thematic analysis of the HIV programmes there are a number of key educational principles/strategies such as that could be incorporated within a Kaupapa Māori framework. These include values that embody relevancy of instructive strategies, advocate for shared learning goals, acknowledge specific transmission processes for knowledge, skills & values, within the social & cultural context.

Next steps: The development of a successful, community HIV & AIDS in- tervention/prevention programme for rangatahi Māori wahine would be en-hanced by adopting those identified educational principles and pedagogy that embrace a Māori worldview and are culturally appropriate.

Presenting author email: lisa@waikato.ac.nz

WEPE0380

First Nations youth and sexual health messaging: let’s talk about sex, baby!

M. Deleary
Assembly of First Nations, Health and Social Secretariat, Ottawa, Canada

Issues: First Nations youth in Canada create and share video stories on sexual health.

Description: First Nations represent Canada’s largest Indigenous group. As with many of the world’s 370 million Indigenous peoples, Canadian First Nations are over represented in the rates of STIs including HIV. The Assembly of First Nations (AFN), in partnership with the Public Health Agency of Canada and First Nations Inuit Health Branch, created 10 short 3-minute videos by First Nations youth between the ages of 14 to 24 have disproportionately high rates of STI’s across Canada and similar to other health statistics, is primarily due to lack of culturally appropriate information, access to services, and vulnerability to other health risks. The objective was to have the AFN National Youth Council draft, script, film and develop their own videos based on personal stories. The AFN Youth Council members are role models in their communities, their regions and their na-tions, and by delivering messages that are openly and honestly talking about sexual health, First Nations youth will be encouraged to seek positive and accurate information.

Lessons learned: First Nations youth will be given the opportunity to learn more about techniques in social media/networking and working with and target-ing First Nations youth in sexual health. Having First Nations youth participate in all aspects of video production allowed the youth involved to learn more about sexual health issues and needs. Primary findings anticipate that having First Nations youth develop and present the information will positively impact how First Nations youth receive the information and make it relevant and relatable to their lives.

Next steps: The promotion of First Nations youth messaging through AFN websites, YouTube and partner organizations. First Nations youth to create and project their personal stories of sexual health.

Presenting author email: mdeleary@afn.ca

WEPE0377

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0378

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0379

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0380

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0377

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0378

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0379

Wednesday
21 July
Poster Exhibition

Thursday
22 July

Friday
23 July
Late Breaker Posters

Author Index

WEPE0380
WEPE0381
Role of traditional healers in preventing AIDS among indigenous populations in Bangladesh

S.M. Shariful Islam
University of South Asia, International Health and HIV/AIDS, Dhaka, Bangladesh

Issues: Traditional healers are the preferred and most accessible health care providers in the developing countries especially among the indigenous popula-
tions. However, increased threat of HIV and tuberculosis and shortage of human resources for health is essential that traditional healers are included in the HIV/AIDS prevention program. This paper presents the roles of traditional healers in HIV/AIDS prevention and scopes for including them in the national AIDS prevention and control program.

Description: A UNDP initiated community health program in Bangladesh studied the perception and knowledge of traditional healers about STIs and HIV/AIDS prevention. The results were considered while developing a three-day training program for the traditional healers on STDS/AIDS prevention. Collaboration with government departments, hospitals and NGOs supported the network of traditional healers. The project initiated collaboration between traditional healers and medical practitioners as a strategy for prevention of HIV/AIDS. The indigenous healers were provided with 14 days residential training on STI/HIV/AIDS prevention and treatment including counseling and referral.

Lessons learned: Training the traditional healers in HIV/AIDS prevention and STI treatment and counseling helped to reduce harmful practice and build awareness for AIDS prevention in the society.

Next steps: Traditional healers need to be mainstreamed into the formal health systems, giving them some soft of recognition, training and certification would help to reduce the harmful practice and involve them in providing appropriate level of care to the people who need it the most.

Presenting author email: sharif.unid@gmail.com

WEPE0382
Meeting the needs of Aboriginal people at risk of acquiring HIV and living with HIV in New South Wales, Australia in a non-Aboriginal community organisation

M. Grose, S. Scott, C. Cooper
ACON / AIDS Council of New South Wales, Sydney, Australia

Issues: ACON is a non-Indigenous NGO that has had an Aboriginal Project since 1997. ACON is re-orienting itself to increase Indigenous access via the implementation of a new model for ACON’s Work with Aboriginal people 2008 - 2011. Indigenous people comprise 2.5% of the Australian population and 6% of ACON clients.

HIV infection is more widely distributed across transmission modes among Indigenous people with a higher proportion of infections being attributed to injecting drug use and heterosexual transmission, although male homosexual sex is associated with the largest proportion of HIV/AIDS diagnoses among Indigenous people is 2.3 per 100 000 compared to 1.1 per 100 000 in non-Aboriginal people. Indigenous people require HIV services that are culturally appropriate and accessible.

Description: Australian Indigenous people experience health inequalities resulting in an average age of mortality 17 years younger than the general population. Traditional strategies for HIV don’t fit well with Indigenous people. Through the reorientation of services ACON aims to:

- Indigenous people’s access to all ACON programs
- Increase the reach of ACON HIV promotion to Aboriginal people
- Strengthen relationships and partnerships
- Support stakeholders
- Improve ACON's Aboriginal-specific programs

This is a model for mainstream organisations working with Indigenous peoples of their own country.

Lessons learned:

- Organisations need to provide a framework that appropriately meets the needs of Indigenous people, not just delegate to Indigenous employees
- Consultation and partnerships with the target community and key partners is an essential component to the work
- Organisational frameworks need to link with and inform broader policy and advocacy responses

Next steps: Action Plan implementation needs to be regularly monitored with an annual progress review. Evaluation findings are consistently incorporated, with a report produced including recommendations for future work.

Presenting author email: scott@acon.org.au

WEPE0383
Factors predisposing nomadic men to HIV/AIDS at family level in Kajiado district, Kenya

S.S. Lakoli, J.M. Nyagero
KAIMREF, Department of Capacity Building, Nairobi, Kenya, KAIMREF, Health System Research and Policy, Nairobi, Kenya

Background: In many ways, men in Africa influence decisions within the family, and the community in general. Their power, a predominant factor in couples’ reproductive decision making, is a direct consequence of high female illiteracy as well as maternal morbidity and mortality particularly due to HIV and AIDS. The nomadic communities have remained the bastions of power and the main decision makers on matters of sexual and reproductive health. The study aimed at determining factors predisposing the nomadic families to HIV and AIDS.

Methods: A cross-sectional descriptive study design was used. Social mapping was used to trace a determined sample of 233 men aged 15 and above from homesteads and livestock watering points. Data was collected using qualitative and quantitative methods. Quantitative data was analyzed using SPSS software. Descriptive and qualitative data was analyzed thematically. Chi-square test was used to determine relationship between key variables.

Results: Majority (71.1%) were married and 30.4% married to more than one wife. Formal education was very low with more than half (58.3%) having no formal education. Almost half (46.6%) felt that women alone should use family planning methods (FP). About a third (30.9%) of the men reported to have suffered an STI, gonorrhea (79.7%) and syphilis (23.2%). Previous episodes of STI was significantly (P<0.05) associating them with marital status and age group. Majority (78%) of those who have suffered an STI had sought treatment at health facility while the rest used self medication and herbal treatment.

Conclusions: Low level of education, polygamy and STI infections can significantly lead to HIV infections in conservative communities. Men play a major role in STI control and Interventions that address specific communities with low level of education are necessary to reduce the spread of HIV.

Presenting author email: alice.lakati@amref.org

WEPE0384
HIV vulnerability of indigenous people in the Northwestern Argentina

L. Rodriguez1, M. Vásquez2, M. Rojo3, V. Argañaraz2, F. Gareca4, M. Romeo5
1Universidad de Humildad, Epidemiology and Prevention, Buenos Aires, Argentina, 2Consultora Equis, Buenos Aires, Argentina

Background: Indigenous people (IP) are vulnerable to AIDS epidemic but little is known about their HIV prevention knowledge and practices. A preven-
tion program is developing in Salta and Jujuy provinces, directed to popula-
tion in reproductive age (14-49 years old) living in low-income areas. 76.7% live just above or below the poverty line and 17% are indigents. 26.6% of the population recognize themselves as belonging to an indigenous community.

Methods: Key informants related to healthcare access, information and safe sex were analyzed to identify the situation before the program implementation. A domi-
cinary survey was applied on 1280 cases; sampling error +/- 0.61 for simi-
lar distributions and CI 95%. IP database size was 340 cases. For identify-
ing vulnerabilities on IP they were compared with general population (GP).

Results: 73.2% GP and 79.1% IP did not consult health providers previously about SHI in 2008, increasing +9% among men. About HIV transmission knowledge, 6% GP and 88.5% GP identified vaginal sex with a partner with HIV infection; 25.9% IP and 34.5% GP identified anal sex; 16.5% IP and 23.6% GP oral sex. Only 5.23% IP and 10.8% GP identified MTCT. Among IP, 33.3% of young and 13.7% of adults used a condom in their first sexual intercourse. Among GP it increases to 43% and 18% respectively. Method used to reduce preventing HIV infection is taking prevention with this population

Conclusions: Indigenous people share barriers to healthcare access with other local poor population but their vulnerability increases because of their lack of preventive information and unsafe sex practices. The study provided relevant information to design specific prevention strategies.

Presenting author email: prevencion@huesped.org.ar

WEPE0385
HIV outreach among Amazonian indigenous migrants living in Lima-Peru

I. Alva1,2, R. Blazquez1,2, R. Orellana3, C. Medrano4, E. Hurley5, J. Bartolo2, C. Zavala2, M. Cueva2, J. Reateguy6, S. Santos2, R. Cabello2
1Universidad Peruana Cayetano Heredia, School of Public Health, Lima, Peru, 2Instituto Peruano de Salud Intercultural, Lima, Peru, 3Centro Nacional de Salud Intercultural, Lima, Peru, 4Asociacion Intercultural de Desarrollo de la Selva Peruana, Lima, Peru

Background: Most residents of Lima, the capital of Peru, are migrants from other parts of the country. Many migrate from or pass through Amazonian cities with HIV prevalences higher than the national average. While there are a few programs focusing on HIV prevention with indigenous people in their communi-
ties of origin, there currently exist no programs focused on AIDS/STI prevention among Amazonian indigenous populations living in Lima.

Description: From 2008-2009, we identified approximately 200 Amazonian indigenous migrants in Lima. We approached gay and heterosexual males to offer them HIV testing, condoms and HIV/STI information. We also contacted traditional midwives, healers, college students, and community leaders to inter-
view them about their knowledge and perceptions of HIV.

Lessons learned:

1) Interdisciplinary work with their closest health providers from the Ministry of Health and with their local and national indigenous leaders favored the suc-
cess of our field work activities.
2) The majority of Amazonian indigenous migrants we identified in Lima be-
longed to the Shipibo-Konibo and Awajun ethnic groups. These populations need customized approaches according to their cultural beliefs and migration patterns.
3) Understanding the interests and experiences of Amazonian migrants, in-
volving local and national indigenous leaders and collaborating with Ministry of Health is critical for the success of the intervention with this population

Conclusions: Culturally appropriate approaches for HIV prevention among indigenous peoples are needed not only in rural but also in urban settings.

Next steps: We plan to expand beyond HIV services, implementing STI pre-
vvention and testing for other more frequent infections including human papillomavirus.
**Vulnerability reduction**

**WEPE0386-WEPE0395**

**Fertility desires among HIV sero-discordant couples in resource limited settings**

R. Nalipina, HIV Discordant Couples with Fertility Desires

**Background:** In Uganda, just like any other African country, child bearing is a principal goal of any marriage, this relates to the increasing number of discordant couples attending BUSODA clinic who desire to have children.

**Intervention or response/methodology:** A cross sectional observational study was conducted among couples in HIV discordant relationships attending the BUSODA clinic. A questionnaire was administered to couples in discordant relationships on an individual basis by HIV counselors working in the BUSODA clinic. Data was analyzed using the SPSS package.

**Results & lessons/key findings:** 16.6% (35) of the respondents reported that they did not have any children with their current partners as compared to 83.4% (181) who had children. Respondents were asked on whether they were willing to give birth (again) given that they are now in discordant relationship, 34.4 (74) responded yes, 59.6 (131 participants responded no and 6.0 (12) respondents were not sure on whether they wanted to give birth or not. The respondents were further asked whether they thought couples in discordant relationships should go ahead and give birth and 29.7% (66) thought they should, 52.8 (118) thought that couples in discordant relationships should not give birth and 17.5% (39) were not sure whether couples in discordant relationships should give birth or not.

**Recommendations:** The above findings indicate the desire by couples in HIV sero-discordant relationships to have children and the urgent need to come up with cost effective and safe ways of supporting them in having babies without exposing the HIV sero negative partner to the risk of contracting HIV. The HIV counseling and test should integrate reproductive health issues in their weekly meetings and seek support from the clinicians.

Presenting author email: rnakijoba@ananzi.co.za

---

**WEPE0387**

**Condoms and kerosene reaching households with HIV-prevention**

H. Almeyahu

Timret le Hiwot Ethiopia (TLH Ethiopia), Addis Ababa, Ethiopia

Households are particularly vulnerable to HIV because of their gender, age, and socioeconomic conditions which separate them to their households. Anecdotal evidence suggests that many households turn to sex work at the encouragement of classmates or following disputes with employers, at which point they are highly vulnerable to HIV.

One of the few locations to reach households is at kerosene sales points. DKT Ethiopia (DKT) and TOTAL Ethiopia (TOTAL) piloted the promotion of condoms to households and low-income women at the TLH's TOTAL station in Addis Ababa from May - July 2009.

The pilot, called Condom and Kerosene (C&K), was supported by the Ethiopian Business Coalition against HIV/AIDS (EBCA), the World Bank Institute's Rapid Results Institute (RRI), and the local NGO Timret Le Hiwot Ethiopia (TLH Ethiopia).

C&K was believed to be a first of its kind collaboration in the world joining an oil and gas company and condom distributor to reach households.

C&K included a budget of Birr 58,000, which was used to pay for condoms, tent and chairs, banner, skilled promoters, and opening and closing ceremonies.

The pilot lasted 60 days, from May 9 - July 9. During this time, promoters conducted demonstrations for 14,243 individuals (6,952 women, 7,291 men) and distributed 35,000 condoms. It also received significant coverage in the local and international media.

C&K can be scaled up to gas stations across Africa.

DKT and TOTAL encountered a few, minor challenges in implementing C&K, including resistance from community members.

Presenting author email: henokalmeayahu@gmail.com

---

**WEPE0388**

**Sensitization of truck drivers on HIV/AIDS and safer sex practices in Balochistan, Pakistan**

H. Khan

Balochistan Rural Support Program, Quetta, Pakistan

**Issues:** HIV thrives on mobile population. Truck drivers particularly the long distance truck drivers are more vulnerable to HIV infection, because they remain cut off from families, often engage in activities such as having unsafe sex with commercial sex workers and fellow crew members, in order to reduce their loneliness.

**Description:** Baseline findings showed abysmally low awareness about HIV/AIDS. 59% of the truck drivers believed that HIV does not exist in Pakistan and only 27% knew about condoms as a method for safe sex and only 1% were using it. 70% were unaware of the risks of unprotected sex. The project started an awareness campaign to increase access to healthcare and other social services in neglected migrant populations.

Presenting author email: magalyblis@gmail.com

---

**WEPE0389**

**Mainstreaming HIV in the low prevalence setting of East Nusa Tenggara Province, Indonesia: Initial assessment**

M. Souradi†, N. Purwaningsih†, E. Wilersdorf†

†Burnet Institute in Indonesia, Jakarta Pusat, Indonesia, †Burnet Institute in Denpasar, Indonesia

**Issues:** Strategic HIV mainstreaming in non-health projects is relatively new in low epidemic settings, where it makes no sense to integrate HIV with everything else, but also important for reasons of cost of resources on HIV or even in the absence of HIV. This is particularly true in East Nusa Tenggara (East NT) where the project is operating alone. Burnet Indonesia undertook a situation assessment to build a foundation of evidence on which to base decisions about what sorts of mainstreaming would be useful in East Nusa Tenggara.

**Description:** The assessment, funded by the Australian Government through ANTARA Project, included document reviews and visits to three sites to conduct Focus Group Discussions, individual interviews and participatory workshop with key stakeholders including ANTARA partner groups, people with HIV and other community members.

**Lessons learned:** ANTARA is committed to support local governance; understanding of approaches taken in this non-health project. Local communities have limited HIV information, are involved in risky sexual practices, but have had very limited exposure to HIV risk reduction campaigns in some locations have created high levels of stigma discrimination. With high mobility, gender inequality and challenging cultural practices, these communities may become more vulnerable to HIV. Few civil society organizations have been exposed to or participated in HIV interventions, but they did identify opportunities for their own projects to promote discussion of HIV issues amongst their beneficiaries.

**Next steps:** Strategic mainstreaming of HIV can commence with awareness raising with ANTARA’s own civil society partners followed by development of strategies to mainstream HIV internally and externally in ways which are focused on this improved understanding of local contexts, challenges and opportunities. Promoting discussion and problem solving with local leaders and health service providers can build local commitment and leadership, and also ensure that local communities keep track of potential growth of the HIV epidemic in such low prevalence settings. Further discussions about lessons learnt in similar contexts can provide insights for future programming.

Presenting author email: marcia@burnetindonesia.org

---

**WEPE0391**

**Informed and empowered: Guyana sex workers mobilize for effective HIV prevention for loggers and surrounding communities**

S. Wilson, N. Singh†, M. Edwards†

†International Labour Organization, Organization, Aids, Beterverwagting, Guyana, ‡International Labour Organization, AIDS, Georgetown, Guyana, †One Love, Kwakwani Park, Guyana

**Issues:** The HIV prevalence rate among sex workers in Guyana is 16.6%. Sex workers in Guyana have traditionally been trained to protect themselves and their clients from infection. In addition to reducing vulnerability by training sex workers on how to protect themselves and their partners, they are empowered to form partnerships for community change, thereby reducing further their vulnerability to HIV/AIDS.

**Lessons learned:** This successful partnership demonstrates that sex workers can be powerful advocates for HIV prevention. In addition, when sex workers have information on risk reduction and their right to be involved in designing and implementing policies that affect their lives, they will actively engage in these communities in HIV prevention education.

Presenting author email: marcia@burnetindonesia.org
WEPE0392
Faith leaders building bridges with the lesbian, gay, bisexual, transgender and intersex (LGBTI) people and commercial sex workers (CSW) through HIV and AIDS related faith-based responses in Sub-Saharan Africa

C.A. Opinde1, C.C. Kangale2, I.P. Mokghei-Heath3, P.K.B. Mokghei-Heath1

INERELA+, Programmes, Johannesburg, South Africa, INERELA+, Advocacy, Johannesburg, South Africa, INERELA+, Member, Johannesburg, South Africa, Witwatersrand University, Gay and Lesbian Archives (GALA), Johannesburg, South Africa, *Hope and Unity Metropolitan Community Church, Pastor, Johannesburg, South Africa

Issue: Globally, unprotected sexual contact contributes to over 90% of all HIV transmissions. In all Sub-Saharan countries HIV prevalence among homosexual and CSW is sometimes as much as three times higher than the general population. Although common in Sub-Saharan Africa, homosexual behaviour and commercial sex work is highly stigmatized, especially by faith communities. As a result, stigma, shame, denial, discrimination, inaction and misinformation faced by LGBTI people and CSW push them farther to the margins of their societies and therefore increases their vulnerability to HIV infection. Here on the margins, access to HIV treatment, care and support is almost nonexistent and inaccessible.

Description: The International Network of Religious Leaders Living with or Personally Affected by HIV and AIDS (INERELA+) believes in a rights-based approach defending justice for all in reaching out to LGBTI people and CSW in HIV prevention and response. This faith-based response is currently implemented in South Africa, Zimbabwe, Mozambique, Kenya and Nigeria in collaboration with people living with and vulnerable to HIV infection. INERELA+ has designed these responses in partnership with key populations thus exposing faith leadership and the church at large to interplay dialogue between CSW and HIV/AIDS to enhance learning and efficacy in HIV advocacy and action.

The goal of these responses is to reduce SEDDM associated with marginalized groups thus reducing vulnerability to HIV through increased access and utilization of HIV prevention, treatment, care and support services.

Lesson learned: Double the stigma equals double the vulnerability. Religious leaders living with HIV collaborating with key populations can create a dynamic relationship within faith communities that challenges vulnerability to HIV.

Next step: INERELA+ promotes dialogue between religious leaders and key populations to enhance openness in overcoming stigmatizing and discriminatory views and policies on sex, sexuality and gender in relation to HIV and AIDS prevention strategies.

Presenting author email: carolyne.opinde@inerela.org

WEPE0393
Dealing with homophobia and comprehensive care among healthcare and education professionals as a way to approach young homosexuals in Brazil

F. Pedrosa1, C. Castro1, A. Caetano2, A. Loca1

Grupo de Resistencia Asa Branca- GRAB, Diretoria, Fortaleza, Brazil, *Grupo de Resistencia Asa Branca- GRAB, Fortaleza, Brazil, *Grupo de Resistencia Asa Branca, Fortaleza, Brazil

Issues: Coping with the vulnerabilities of young homosexuals in STIs/AIDS in Brazil is an area of concern in School and Healthcare centers. The city of Fortaleza, the fifth largest city in the country, according to a 2004 survey conducted by the city, is the city with the highest levels of homosexuality in schools. In the area of Health, a 2009 survey spearheaded by the Grupo de Resistencia Asa Branca - GRAB, a LGBT Non Governmental Organization, identified school teachers and healthcare professionals as the main cause of homophobia toward gay youth. The survey goes on to identify that 44% stated that their learning is hindered because of the discrimination, 76% of the young people surveyed do not go to public healthcare centers and do not seek the free condoms distributed in these centers because of homophobia.

The gay and bisexual population, according to the Ministry of Health, has an incidence of AIDS estimated to be 11 times greater than that of the general population, therefore becoming a population which comprises a concentrated epidemic in the country.

Description: GRAB has been executing the SAGAS Project, along with support from the Schorer Foundation, in the area of prevention among young homosexuals, in the poorest communities, concentrating efforts in the field of sexual health, following the planned prevention methodology and peer education. Included in intersectiornality are advocacy measures, training and research, together with teachers and healthcare professionals from the public system, aiming toward a pedagogical approach and comprehensive care, which is not homophobic.

Lesson learned: A major lesson learned is that in order to modify this picture, integrated effort is needed in an individual, social and programmatic level which includes planned and sustained action together with the public healthcare and educational systems.

Next steps: Advocacy work, so that recommendations may be included in public health and education policies.

Presenting author email: chcnp28@hotmail.com

WEPE0394
A community-based intervention to reduce HIV stigma, discrimination and social marginalisation in Mqatshehi, a rural community of South Africa

K. Moodley1, S. Pillay1, M. York2, J. Healy1, S. Milbeni3, N. Majaliwa2

University of KwaZulu-Natal South Africa, Enhancing Care Initiative, Durban, South Africa, *University of KwaZulu-Natal, Khuphuka, Pietermaritzburg, South Africa

Issues: Mqatshehi, in rural KwaZulu Natal province, is characterised by poverty, unemployment, and high prevalence of HIV and AIDS. Stigma, discrimination, and social marginalization exacerbate this community’s vulnerability to HIV. Prioritizing interventions to reduce these factors are essential to address these sources of HIV risk and to create an enabling environment for the health and well-being of the community. Many strategies are short-lived, fragmented and not contextualised to the area resulting in the communities’ continued vulnerability to HIV and AIDS.

Description: The Khuphuka Project involved the implementation of a simple, cost-effective model that ensured community participation, ownership and long-term sustainability. The program included a consultative process, needs-elicitation using interviews and focus group discussions and a structured intervention based on the elicitation phase and delivered by trained, dedicated, nominated members of the community. The structured intervention included identification of the most vulnerable households, regular home visits, intensive counselling, facilitation of support groups and appropriate referral for care. The majority of the recipients were women (82.5%) who were found to bear the brunt of discrimination.

Lesson learned: The implementation of this community-based, structured intervention was found to be effective in reducing HIV-related stigma, discrimination, and social marginalization. Among others, uptake of VCT and voluntary disclosure increased following intervention. This provides compelling evidence that simple, yet cost-effective strategies sensitive to a communities’ cultures and norms, can result in effectively reducing stigma and discrimination.

Next steps: Community-based and owned strategies can be effective in addressing difficult issues related to HIV and AIDS. It is recommended that governments scale-up proven HIV intervention strategies in communities using best practices such as this to model appropriate programs.

Presenting author email: moodleyk1@ukzn.ac.za
WEPE0396
Providing technical support to U.S. health departments and community partners to facilitate public/private partnerships in the use of social media tools and online communities for HIV/STD prevention activities

D. Kern1, S. Adelson2
1National Alliance of State and Territorial AIDS Directors (NASTAD), Washington, United States, 2Adelson Consulting, Chelsea, United States

Issues: The continued growth of online gay male communities that facilitate sexual networking websites that public health departments are encouraged to address HIV and STI risks. Through the use of Internet-based interventions, at-risk gay men can be efficiently reached and linked into prevention care and services. Public health organizations have been slow to use new technologies in their programs, due to a lack of basic understanding, training, technical assistance (TA) and bureaucratic barriers. Additionally, programs currently implementing technology-based interventions often lack planning and evaluation.

Description: Through funding from the U.S. Centers for Disease Control and Prevention (CDC) and the National Alliance of State and Territorial AIDS Directors (NASTAD) and the National Coalition of STD Directors (NCSD) partnered with Adelson Consulting to create a “Public Health and Technology” liaison. The liaison will work directly with health departments across the country to provide TA and TA enhancement coordination, thereby increasing the delivery of Internet-based services, outreach and programmatic efforts using social media. Providing centralized TA increased coordination at local and national levels and use Internet-based technologies to reach at-risk populations across the U.S., advanced the development of policies and guidance; facilitated peer-to-peer support; and strengthened the relationship between CDC, NASTAD and NCSD.

Lessons learned: Several lessons were learned through the development of a national liaison:
1. Public health organizations are in need of and value support related to new technologies;
2. Negotiations with online businesses are essential to the successful delivery of public health programming;
3. Public health organizations benefit from consistent communication and meaningful resources; and
4. HIV and STD programs can effectively collaborate to provide prevention services.

Next steps: TA and support will be enhanced to include additional public health organizations. Additional resources that address emerging issues (e.g., addressing bureaucratic barriers) will be developed and delivered through national conferences/webinars.

Presenting author email: sadelson@sadelson.com

WEPE0397
'Never testing for HIV' among men who have sex with men recruited from a sexual networking website: a behavioral and medical interview

A. Margolis1, S. Hirschfeld,2, J. Joseph1, M.A. Chaisson2, L. Belcher2
1Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, Atlanta, United States, 2Public Health Solutions, Research and Evaluation Unit, New York, United States

Background: HIV testing remains a critical tool for the prevention of HIV infection, as many persons testing positive take steps to protect themselves and their sexual partners. However, approximately 20% of persons with HIV are unaware of their infection. The steady increase in HIV incidence among men who have sex with men in the United States underscores the need to broaden our understanding of effective strategies to increase testing among at-risk persons.

Methods: An email was sent to approximately 675,000 members of a gay-oriented sexual networking website inviting men to participate in an internet-based behavioral survey. 11,721 men initiated the survey. Logistic regression was used to identify correlates of never being tested for HIV.

Results: 8,472 provided information to assess history of HIV testing. Most of the men (mean age =39) were white (82%), college educated (54%), gay-identified (84%), and reported recent anal sex with a man (68%). Residential geographic characteristics of the sample varied (3% rural, 38% small urban, 22% medium urban, 27% large metropolitan). Most men had been tested for HIV in their lifetime (58% ≤1 year; 33% >1 year), and 17% of men tested were HIV-positive. Approximately 9% of men, including 26% of those 18-24 years of age, had never been tested for HIV. Nearly a quarter of these men (24%) did not know where to get tested. In multivariate logistic regression, significant predictors (p<0.001) of never being tested included younger age (18-24), having bisexual living in rural/small urban communities, and not having a healthcare provider.

Conclusions: Despite high levels of HIV testing in this population, a significant number of men had never been tested for HIV. Critical gaps in testing were observed among younger men, those identifying as bisexual, and those most at-risk for HIV. Increasing access to and knowledge of testing sites is needed.

Presenting author email: amargolis@cdc.gov

WEPE0398
Successfully reducing sexual risk behaviour among youth: the development and evaluation of an interactive video-based intervention online

U. Davidovich1, H. Urr-Daall, M. Frins
1Amsterdam Health Services, Research Department, Online Research and Prevention (ORP) Unit, Amsterdam, Netherlands

Background: This study presents an intervention and its evaluation aimed at engaging youth aged 16 to 24 in an innovative approach to counteract barriers to safe sex and HIV testing.

Methods: The intervention - www.vrijlekker.nl - has been developed based on over 200 qualitative interviews online with youth in the Netherlands. We investigated the barriers to HIV testing and safe sex with casual and steady partners. These barriers were translated into online training modules based on the Information-, Motivation-, and Behavioural Skills (IMS) model (Fisher & Fisher). The training includes filmed love coaches that guide users throughout the intervention, thematic films & interactive text rich with feedback. The modules are offered on a tailored basis to match each user’s cognitive & behavioral barriers, which are established during an online intake. A non-RCT evaluation was conducted with a demographically matched control group measured prior to the launch of the intervention. Behavioural outcomes were measured at 6 month follow-up.

Results: The evaluation included 2944 participants of whom 1553 completed the follow-up (mean age 19; SD 2.4). At follow-up, the intervention group used condoms significantly more often with their most recent casual partner [OR=1.82; 95% CI 1.60 - 2.04] and with their steady partner [OR=2.17; 95% CI 1.48 - 3.18] than the control group. Over 170,000 visited the website already during its first year, and about 300 visitors continue to do so every day. Some schools in the Netherlands have adopted the site as part of their routine sexual education program.

Conclusions: This study successfully managed to offer youth an empirically and theoretically sound intervention that is engaging, interactive and matched to their individual needs resulting in a desire for behavioural change and high uptake, even among this challenging target group.

Presenting author email: udavidovich@ggd.amsterdam.nl

WEPE0399
Facebook, Twitter, Second Life and Orkut based focused interventions for teen age groups

J. Haral1, D. Sahr2
1HIV ATLAS.org, Administration, New Delhi, India, 2HIV ATLAS.org, Media Relations, New Delhi, India

Issues: Teenage children spend a considerable amount of time in virtual world of Internets and are not active participants of school health education programs.

Description: HIV ATLAS online counselors made their profiles on Facebook, Twitter, Second Life and Orkut to penetrate 11 groups of mainly anonymous teen aged population on these popular social media sites. After learning the basic lingo of those groups to be accepted as one of their own, they were pleasantly surprised that striking just about any discussion on sex and sexuality was very easy and participants had lot of questions on HIV. While a considerable number of participants had misconceptions, active discussions were mostly constructive and led to good conclusions and thanking all around.

Lessons learned: Effective, economical intervention campaigns can be carried out on Internet based social networking sites to target vulnerable population group like teen aged children.

Next steps: Counselors in urban areas particularly should be imparted training on social media based interventions.

Presenting author email: jharal@hivatlas.org

WEPE0400
Using the internet to disseminate HIV/AIDS information to US college and university students

1Davidson College, Biology, Davidson, United States

Issues: Despite over two decades of educational and outreach programs designed to spread the prevention of HIV/AIDS, new infections continue to occur at an alarming rate, especially among young people. In the United States, approximately one half of all new infections occur in people under the age of 25. This statistic tells us that the epidemic is not being contained or are not being heeded by this demographic. To improve HIV/AIDS awareness among young people, we are exploring ways of utilizing the Internet to disseminate important information about the disease.

Description: Previously, we developed a multi-media Web site that explores HIV/AIDS and popular culture (http://www.biology.davidson.edu/dawessner/361HIV/AIDS_Pandemic.html) designed to disseminate information about HIV/AIDS and initiate conversations between our college students and the broader HIV/AIDS community. To develop more effective HIV/AIDS prevention strategies targeting US college and university students, we recently investigated the new media-usage habits and factual HIV/AIDS knowledge of our students. Students at a single US college were electronically surveyed. Lessons learned: Approximately 28% of students completed the survey. The majority of students underestimated the prevalence of HIV in the US, and the vast majority of students did not perceive themselves as being at risk for HIV. Media use results were positive with the vast majority of students preferring Facebook and YouTube to other media formats. However, our results also...
WEPE0403 Reducing risk-taking in gay men with partners met online: a translational project on the influence of virtual fantasizing on in-real-life sexual behaviours of gay men
P.C. Adam1, J. de Vil1, D. Murphy1,2
1University of New South Wales, National Centre in HIV Social Research, Sydney, Australia, 2 Institute for Prevention and Social Research, Utrecht, Netherlands, 3Utrecht University, Dept. of Social and Organizational Psychology, Utrecht, Netherlands, 4Australian Federation of AIDS Organisations, Sydney, Australia

Background: Meeting partners online is associated with increased sexual risk-taking in MSM. Why this is so has, however, not been fully explored, which limits effective (online) HIV prevention. To address this gap a combined research and intervention project was conducted. Based on the findings from a study exploring how online chatting contributes to in real life (IRL) sexual risk taking in MSM, a new online HIV-prevention intervention was developed.

Methods: An online survey of 2,572 MSM in France assessed intention to use condoms, the contents and dynamics of online chatting, in particular how men responded to chat partners who initiated virtual fantasizing about unprotected sex, and instances of unprotected anal intercourse with partners met online (UAIP0).

Results: While men's intention to use condoms was high (M=4.6; theoretical range=1-5), acceptance of online fantasizing about unprotected anal sex was moderate (M=2.5), and 31% of respondents reported UAIP0. Online fantasizing about unprotected anal sex contributed significantly to UAIP0 (OR=1.45, p < .000), over and above behavioural intention to use condoms. While they planned to use condoms, a substantial proportion of MSM have UAIP0 after online chatter, which fantasizes about risk are shared with a prospective sexual partner.

Conclusions: This study shows that virtual fantasizing about unprotected anal sex promotes IRL sexual risk-taking. Findings suggest that virtual fantasizing affects MSM's sexual scripting and influences their sexual behavior in highly unintentional ways. While some men as well as prevention professionals may believe that online chatting has little consequence IRL, our findings indicate that the HIV prevention need is that these dynamics of online chatting. In a large online RCT we tested an intervention to reduce UAIP0 by increasing MSM's awareness of the potential consequences of virtual fantasizing and supporting them to use simple plans to self-regulate their online behavior.

Presenting author email: j.dewit@unsw.edu.au

WEPE0404 Trazing of anonymous internet contacts to HIV/STI patients in Sweden: is tracing an anonymous contact through the website feasible?
M.-L. Ingsäter, R. Vyth, I. Berggren

Department of Communicable Disease Control and Prevention, Stockholm County, Stockholm, Sweden

Background: Tracing of contacts around sexually transmitted diseases (STD); hiv, gonorrhoea, syphilis and chlamydia is compulsory by law in Sweden. The local Department of Communicable and Preventive Medicine (SME) is responsible to fulfill tracings that have not been completed by the treating physician. Internet has increased the possibility of finding a partner and to have anonymous sex. The index patient may only know the nickname and the website making traditional partner notification impossible.

Methods: A mail was sent to the given “nickname” suggesting the contact to call a given number regarding an important health issue. Information of the specific disease, risk of being infected and where to be tested was given over the phone. The testing was confirmed if the contact revealed his/her identity.

Results: During 6 months in 2007, 48 notifications of anonymous Internet contacts were reported to the SME, 31 could be traced through their “nick-name” at a given website and 15 called back for information. Testing was confirmed for 12 of the informed contacts. The dominating anonymous internet contact was a man having sex with other men with a median age 37 for HIV contacts and 29 for other STD.

Chlamydia and hiv- infection dominated and dual infection was prevalent.

Conclusions:
- Internet contacts for anonymous sex are possible to reach if the nickname and contact site is known. Contacts who receive information get tested.
- A short interval between possible transmission and the tracing increases the chance of finding an internet contact.
- The index and the contacts were almost exclusively men that had sex with other men.

Presenting author email: marie-louise.ingsater@ssl.se

WEPE0405 Packaging evidence effective-based interventions: ensuring such interventions are not a disruptive technology
M. Vagl, B. Morales1

1Latino Commission on AIDS, Research and Evaluation, New York, United States, 2Latino Commission on AIDS, RED, New York, United States

Issues: The process of packaging and disseminating effective behavioral interventions (EBIs) for NGO implementation has been undertaken since 2002 by the Centers for Disease Control and Prevention (CDC). In 2004, it was noted that such interventions developed in a controlled environment...
integrating HIV prevention into reproductive health/STI programmes

WEPE0406
Integration of HIV with other SRH services reduces HIV prevention cost in resource poor setting: empirical evidence from Family Planning Association of Nepal (FPAN)

G. Sharma Paudel
Family Planning Association of Nepal, Program Division, Kathmandu, Nepal

Background: Seven percent of national budget is allocated for health sector and public sector contributes one percent in total HIV/AIDS budget in Nepal. Most of the financing in this sector is made by NGOs and EDPs. HIV prevention is not fully integrated into SRH services in public health sector which increases the program cost. Therefore, this study was conducted to demonstrate a cost effective integrated model for HIV prevention based on NGO experience in Nepal.

Methods: Six vertical VCT centers, two each in public, NGO and private sector, were established and same amount of resources were invested in each centre in 2006-2007 by FPAN. Capital cost to establish a VCT centre and cost per VCT client in vertical program was calculated in these centers. During same period, FPAN was expanding HIV prevention integrating with other SRH services. Additional cost involved in integration of VCT services into other SRH services and cost per VCT client in integrated clinic was calculated in FPAN’s climate change project.

Results: Capital cost to establish a VCT centre in vertical program was US$ 2,830 while it was US$ 1,802 in integrated clinic in 2006-2007. Similarly, the cost per VCT client in vertical program in NGO sector was US$ 13; it was US$ 23 in public sector and US$ 24 in private sector in Sindhuli and Kapilvastu districts in Nepal. In contrast, the cost per VCT client in integrated clinic managed by FPAN was just US$ 6.3.

Conclusions: Cost for VCT services is found substantially low in an integrated program compared with vertical program. Similarly, cost per VCT client is found significantly low in integrated clinics compared with vertical clinics. Thus, integration of HIV prevention with other SRH program helps to reduce the program cost and scaling up the HIV response in resource poor setting.

Presenting author email: gpaude@fpandp.org.np

WEPE0407
Integrating family planning: an intervention designed to increase integrated HIV testing in family planning clinics in the Midwestern United States

T. Basta*, K. Sherman*, M. Clesi†, H. Ressa†
*Ohio University, Athens, United States; †Health Care Education and Training, Inc., Indianapolis, United States; †Planned Parenthood of Indiana, Indianapolis, United States

Issues: In the United States, the majority of publicly funded family planning clinics offer HIV testing services, however, few offer integrated testing. Integration of family planning occurs when a rapid HIV test is offered to all clients regardless of the service rendered.

Description: In 2005, Health Care Education and Training, Inc. (HCET), a non-profit organization based in Indiana, received federal funding to increase the number of family planning clinics in Region V (Illinois, Indiana, Ohio, Michigan, Minnesota, and Wisconsin) that offer integrated HIV testing ser-

vices. HCET partnered with Planned Parenthood of Indiana (PPIN) to develop a “model clinic” intervention to increase the number of PPIN clinics that offer integrated HIV testing to their patients, improve service delivery and establish an established technology. The EBIs are considered reliable as since labeled effective. They are considered cheaper because funders are funding EBIs at a faster rate than homegrown inter-

ventions. However, there have been various barriers to implementing EBIs such as changes with recruited staff and the need for new skill sets in workforce staff-creating a knowledge economy. The question arises as to how funders can fund EBIs so they are not disruptive to NGO operations and community

connectivity.

Conclusions: The Latino Commission on AIDS entered into a cooperative agreement with the CDC to package and pilot test (through case study sites) an intervention called Insights which is an effective minimal tailored self-help technology-based intervention (implemented through a web interface). It is intended to broadly reach and educate young women around HIV and STIs. While the intervention is minimal since it is web-based and consists of two newsletters delivered to the women, there were still concerns about it being a disruptive technology. The Latino Commission on AIDS entered into a cooperative agreement with the CDC to package and pilot test (through case study sites) an intervention called Insights which is an effective minimal tailored self-help technology-based intervention (implemented through a web interface). It is intended to broadly reach and educate young women around HIV and STIs. While the intervention is minimal since it is web-based and consists of two newsletters delivered to the women, there were still concerns about it being a disruptive technology. Lessons learned: A minimal intervention requires much pre-implementa-

tion groundwork that cannot be circumvented. Furthermore, recruitment and retention strategies need to still be carefully considered and prescribed training manuals. A strong emphasis on quality assurance and protocol devel-

opment also needs to be provided in the packaged-materials.

Next steps: Changes to packaged materials and further piloting with differing types of NGOs will occur.

Presenting author email: mvega@latinoaids.org

WEPE0408
Men’s wellness center: a comprehensive walk-in wellness model clinic to attract high-risk male populations for HIV and STD testing and treatment - a five-year review

P. DenCoudy*, A. Ruiz†, M. Zimmerman†, M. Iyavakabuku†, M. Middleton†, W. Engeran-Cordova†, T. Nguyen†, P. Kerndt†, C. Wigen†, E. Rudy†, H. Khanou†
*AIDS Healthcare Foundation, Department of Medicine, Los Angeles, United States; †AIDS Healthcare Foundation, Department of Public Health, Los Angeles, United States, ‡Center of Los Angeles STD Program, Los Angeles, United States

Issues: People who are unaware of their HIV serostatus remain one of the major obstacles to slow the spread of HIV infection. Many at-risk persons still have significant barriers to streamlined HIV testing on a regular interval such as cost, inconvenience, slow testing turnaround times, insurance barriers, and stigma. We sought to alleviate these barriers by implementing a free, walk-in, evening/weekend wellness clinic testing model to generate general sexual health, STD screening/treatment and counseling, and perform rapid HIV testing on high-risk male populations.

Description: Men’s Wellness Center was established in 2005 with the goal to maximize rapid HIV testing availability in a convenient, ac-

cessible, non-stigmatizing manner in the context of a general sexual wellness model clinic to attract hard to reach high-risk male popula-

tions. What makes the EBIs a disruptive technology? Disruptive innovations are typically cheaper, more reliable and simpler than an established technology. The EBIs are considered reliable as since labeled effective. They are considered cheaper because funders are funding EBIs at a faster rate than homegrown inter-

ventions. However, there have been various barriers to implementing EBIs such as changes with recruited staff and the need for new skill sets in workforce staff-creating a knowledge economy. The question arises as to how funders can fund EBIs so they are not disruptive to NGO operations and community

connectivity.

Conclusions: The Latino Commission on AIDS entered into a cooperative agreement with the CDC to package and pilot test (through case study sites) an intervention called Insights which is an effective minimal tailored self-help technology-based intervention (implemented through a web interface). It is intended to broadly reach and educate young women around HIV and STIs. While the intervention is minimal since it is web-based and consists of two newsletters delivered to the women, there were still concerns about it being a disruptive technology. The Latino Commission on AIDS entered into a cooperative agreement with the CDC to package and pilot test (through case study sites) an intervention called Insights which is an effective minimal tailored self-help technology-based intervention (implemented through a web interface). It is intended to broadly reach and educate young women around HIV and STIs. While the intervention is minimal since it is web-based and consists of two newsletters delivered to the women, there were still concerns about it being a disruptive technology. Lessons learned: A minimal intervention requires much pre-implementa-

tion groundwork that cannot be circumvented. Furthermore, recruitment and retention strategies need to still be carefully considered and prescribed training manuals. A strong emphasis on quality assurance and protocol devel-

opment also needs to be provided in the packaged-materials.

Next steps: Changes to packaged materials and further piloting with differing types of NGOs will occur.

Presenting author email: basta@ohio.edu

WEPE0409
Improving access to family planning at HIV clinics through prevention with positives in Kenya

A. Gohale, T. Marwa, J. Malonza, P. Lynam
*Jhpiego - an Affiliate of Johns Hopkins University, HIV/AIDS, Nairobi, Kenya

Issues: Women living with HIV have to avoid unwanted pregnancies, protect their own health and eliminate the risk of transmitting HIV to their unborn baby. One of WHO’s prongs for preventing mother-to-child transmis-

sion of HIV is preventing unintended pregnancies among HIV-positive women. The Prevention with Positives (PwP) approach equips health care providers with knowledge and skills to provide key messages to People Living with HIV (PLHW) that include Family Planning (FP) and condom use.

Description: In 2009, Jhpiego in partnership with Ministries of Health, initi-
ated Prevention with Positive (PwP) interventions in Kenya. Health care provi-

ders (mainly nurses and clinical officers), totaling 1,150, were trained on how to deliver PwP messages to clients attending HIV clinics. The training events lasted five days, with the first two used to orientate facility in-charges and managers on PwP messages and the subsequent three days of training pro-

vided on how to deliver these messages. Service providers were trained on how to counsel PLHW for FP and how to refer PLHW to other FP related services. Following the trainings, 47% of the targeted sixty five HIV clinics initiated FP services with growth from 14% in 2008 to 7% in 97% of facilities currently offer condoms at the HIV clinics. Fifteen trainees from two provinces were followed up six weeks after the training and it was established that they either offered FP at the HIV comprehensive care clinic or made effective referrals to the FP clinic by physically escorting the clients there.
WEPE0401
Bringing HIV testing and counseling to the doorstep through an integrated approach: case for Malawi
E. Khoman, G. Phetena, M. Nyirango
Management Sciences for Health, Arlington, United States

**Issues:** HIV testing is a critical entry point for care, treatment and prevention interventions but testing prevalence in Malawi remains low at 30%. There are nearly 100,000 new HIV infections and deaths annually in Malawi, and nearly half of new cases occur among young people aged 15-24. To augment Malawi’s response to the HIV epidemic, CPHMS program sought to aggressively promote HIV counseling and testing (HTC) services to ensure that all Malawians have access to HTC services.

**Description:** The Community Based Family Planning and HIV and AIDS Services (CPHMS) Programme with funding from USAID integrated HIV testing and care and treatment services into family planning (FP) programs in order to increase access of both, particularly in the rural underserved areas. Provision of 85% of Malawians live. 1000 volunteer Community Based Distribution Agents (CBDAs) trained to provide door-to-door HTC and FP services.

**Lessons learned:** This approach has increased access to HTC and FP services to people in hard to reach, rural areas of Malawi. Program trained CBDA increased contraceptive coverage from 20,000 to 39,000 couple years between the first and 4th quarter of 2009. Additionally, 67,000 people learned their HIV status through door-to-door integrated HTC and FP services, and 700,000 people received family planning and HIV messages during the same period. A community health logistics system has been developed between the CBDA cover age and linkages have been established between the CBDA’s and the MoH facilities for supervision, supplies, Quality Assurance and referrals.

**Next steps:** Integration of FP and HIV services has reduced costs and issues of stigma, people have reported being comfortable testing in the privacy of their homes. The programme in collaboration with MoH plans to expand its activities by training more CBDA’s to bring HTC services closer to the majority of Malawians.

WEPE0402
Integrating harm reduction into HIV services for female drug users
R. Pun
Sharan Nepal, Women HIV/AIDS Cell, Lalitpur, Nepal

**Issues:** In Nepal, HIV epidemic is spreading fast and causing devastating impact on the lives. Female drug users [FDU]. Overwhelming number of terminally ill HIV-positive FDU who need care & preventive harm reduction service visit overstretched care facility. The aim of Sharan’s HIV prevention & harm reduction program is to provide integrated harm reduction and HIV service to women who use drugs.

**Description:** There are 46,309 hard drug users in Nepal and 62 percent of them are Injecting Drug Users. HIV prevalence is 34 percent and service coverage is below 25 percent nationwide. This clearly indicates that drug users are not getting enough services to protect themselves and others from HIV. Sharan has been implementing this project since 2008 and has successfully been providing clean needle syringes, condom, drop in, referral and immediate hospital based care to female drug users living with HIV.

**Next step:** Meaningful involvement of drug users and PHLA in the project will reduce stigma and enhanced acceptance level. Demand for harm reduction services and coordination with public health service will be increased. Training will be provided to increase the quality of the services offered. The service delivery model will not be stand-alone but be a part of public health scheme. To address the needs of drug users, aggressive promotion of harm reduction services and accessibility to HCV, ART, TB, treatment and prophylaxis will be scaled up.

Presenting author email: rubinapun@gmail.com

WEPE0403
The impact of free condoms on self reported condom use among ART clinic clients in Ghana
N. Akwei Addo1, K. Bruce1, A. Bannerman1, C. Grogan1
1National AIDS Control Programme, Accra, Ghana, 2Formerly of EngenderHealth Ghana, Accra, Ghana, 3EngenderHealth, Ghana, Accra, Ghana, *Former Student at Harvard School of Public Health, Boston, United States

**Background:** This 2008-2009 study hypothesized that self-reported condom use would increase when HIV-positive ART clients were given free condoms. Objectives were to 1.) compare rates of self-reported condom use among HIV-positive clients who received free condoms when accessing clinical care with those among HIV-positive clients accessing care in facilities without free condoms; and 2.) estimate the number of infections averted through increased condom use.

**Methods:** Over one year, free condoms (FC) were distributed in intervention ART clinics; condom education (CE) was offered in control ART clinics. Some intervention clinics offered FC and CE combined. Respondents were HIV- positive people over 18 who attended six ART clinics in Ghana. 225 people were interviewed at baseline; 570 at endline. Chi square tests showed whether condom use and likelihood of reporting condom use at last sex (CUALS) increased over time. A logistic regression examined which factors were correlated with increased condom use at edentum. To estimate number of infections averted, the Bernoulli-Process model of HIV transmission was used.

**Results:** Self-reported CUALS was higher among those exposed to FC than among those not exposed over the same year-long period. (OR=3.97, 95% CI=1.7-8.2). In the FC+CE combined arm, approximately 12.53 and 7.79 infections were averted among partners of women and men respectively. In the FC only intervention, the estimates were 3.49 infections and 0 infections. In the CE only arm, it was 0 and 0.29. Because reported CUALS fell between baseline and endline for men at the FC clinic and women at the CE clinics, no infections were averted among their partners.

**Conclusions:** These findings suggest that FC distribution at ART clinics may reduce the spread of HIV. The intervention impacts a high prevalence group in a low prevalence epidemic and responds to the sexual needs of PLHWA. Research to explore the feasibility of FC at ART clinics should continue.

Presenting author email: abannerman@engenderhealth.org

WEPE0404
Antenatal screening of HIV and linkages to ART services in Karnataka, South India: gaps and opportunities
S. Shastry1, R. Washington2, P. Banandur2, S. Moses2
1Karnataka State AIDS Prevention Society, Bangalore, India, 2Karnataka Health Promotion Trust, Bangalore, India

**Background:** Karnataka is a high HIV prevalence state in south India, with an estimated 275,000 people (0.8% prevalence) living with HIV/AIDS. Prevention of mother-to-child transmission programs focus on reducing transmission, with less importance given to ART administration for pregnant women.

**Methods:** Routine data from 569 HIV integrated counseling and testing centres (ICTCs) and 33 ART centres, in all 30 districts of Karnataka., were analyzed for 2009.

**Results:** A total number of 790,695 pregnant women were tested at ICTCs during 2009, with 3,828 testing positive for HIV (0.5%). Only 1,848 (48%)...
of positive pregnant mothers reached an ART centre for pre-ART registration and assessment. CD4 testing results were available for 1,794 (97%) of those referred for pre-ART registration and 704 (39%) were deferred to ART according to national criteria. Of these, only 359 (64%) were actually placed on ART in 2009.

**Conclusions:** Only a minority of HIV-positive pregnant women reached ART centres in 2009. Those who did are adequately screened, but one-third of those eligible for ART were not initiated on ART. This may be due to distance from ART centres, stigma, male-driven decisions, social reasons, and present- ing in late pregnancy. These gaps in referral ART centres and initiation of ART are potentially detrimental to the health of both mother and child. In the light of India’s new policy to initiate ART at CD4 counts less than 350, irrespective of symptoms, a much larger proportion of pregnant women will be eligible to initiate ART in 2010. Guidelines for ART initiation among positive pregnant women in India need to be more actively promoted, along with coordinated, proactive screening and follow-up of positive pregnant mothers, both for referral to ART centres and initiation of ART if eligible.

Presenting author email: sushadoy@gmail.com

**WEPE0415** Late diagnosis of HIV infection: a challenge to healthcare providers and policy makers in a country with universal access to antiretroviral therapy

D.Fontenelle dos Santos, C. Santos Lima, T. Loja, I. Souza, M.C. Pacheco
State University of Rio de Janeiro, Pedro Ernesto University Hospital, Rio de Janeiro, Brazil

**Background:** Despite the universal access to antiretroviral therapy since 1996, the diagnosis of HIV infection is still delayed in Brazil. Many studies have proven that late stage diagnosis is associated with increased risk of death and higher expenses with healthcare.

**Methods:** We conducted a retrospective review of 35 patients newly diagnosed with HIV during hospitalization at Pedro Ernesto University Hospital from State University of Rio de Janeiro (Brazil). Late diagnosis was defined by the identification of AIDS associated diseases during hospitalization or CD4 cell count < 200 cells/mm³.

**Results:** The majority of these patients were male (63%) and 71% aged 30-49 years. At the time of diagnosis of HIV infection 54% had oral/oesophag- eal candidiasis, 29% had Mycobacterium tuberculosis infection, 28% had respiratory symptoms, 25% had cerebral toxoplasmosis and 68% had other symptoms like fever, weight loss and diarrhea. All these patients have been attended at outpatient clinics before the hospitalization at this hospital. Nine patients had died (25%) of the death of a partner. This research supports the need for a renewed educa- tion of physicians regarding taboos and effective means of broaching the topic of sex with senior patients; and also the need to disseminate sexual health information directly to seniors, so that they can adequately determine their own risk level.

Presenting author email: shullock@waterloo.ca

**WEPE0417** The evidence for ending missed prevention opportunities

M. Croce-Galis1, J. Gay1,2, K. Hardee3
1Open Society Institute, Public Health Program, New York, United States, 2Artemis Global Consulting, Hoboken, United States, 3Consultant, Takoma Park, United States, 4Population Action International, Washington DC, United States

**Issues:** In areas of high prevalence, effective HIV prevention strategies are critical. HIV prevention can be incorporated into a number of health interac- tions. For example, testing can be offered to parents bringing their children for immunizations, or when clients visit clinics for family planning services. Unfortunately, combining HIV with other services is often a missed opportu- nity.

**Description:** What Works: Evidence for HIV/AIDS Interventions for Women and Girls, produced by OSI and PAI, provides a comprehensive review of evidence from 2001 to 2009. We will identify the gaps in the information that health providers and policy makers in a community need to share such integrated programs can be effectively implemented in resource poor settings.

Presenting author email: mcrocegalis@gmail.com

**WEPE0418** Expanding access to paediatric HIV testing and treatment: the role of emergency nutrition programs in a rural setting, Kinangoro district, Eastern Kenya

M. Loha1, S. Sinamo2, E. Wambui1, S. Duffy1

**Issues:** Integration with related services is a key strategy for scaling up HIV testing and treatment for children in high HIV-prevalence contexts. As HIV in- fection in children often manifests as acute malnutrition, emergency nutrition programs in high HIV-prevalence contexts provide an opportunity to integrate provider initiated counselling and testing (P ICT) and treatment services.

**Description:** Vision Kenya is implementing a community based manage- ment of acute malnutrition (CMAM) program in Kinangoro district, in the coastal region of Kenya. The project commenced operation in May 2009. 355 malnourished children under five years of age were treated in 21 outreach therapeutic program (OTP) sites and two stabilization centres (SC) accord- ing to global standards for CMAM programs, 334 children (72.6%) were discharged cured, 12 (2.5%) died and 117 (24.8%) defaulted. Based on the project’s emphasis on integration of HIV services with the nutrition program, all children admitted were tested for HIV after parents and guardians were consulted and their consent obtained. Counseling informed parents of the severity and potential outcomes for children with HIV infection and severe acute malnutrition. Eighteen (3.2%) children tested HIV+ and were managed accordingly. All eighteen children had severe acute malnutrition with medical complications highlighting the interlinked impact of HIV and malnutrition on children. Three died, two defaulted and the remainder commenced antiretro- viral treatment.

**Lessons learned:** Although HIV testing is increasingly becoming available, people in rural areas are still not reached by many of the services. Using emergency nutrition interventions can play a key role in availing much needed paediatric HIV services to the most vulnerable in hard to reach areas.

**Next steps:** Based on assessment of the current situation, Vision World in partnership with the Ministry Of Health will conduct operations research on how such integrated programs can be effectively implemented in resource poor settings.

Presenting author email: mshen_loha@wvi.org

**WEPE0419** Integration of HIV prevention and other health programmes WEPE0416-WEPE0425

S.L. Bullock, K. Mairs, N. Pearce, J. Jessup
University of Waterloo, Dept. of Health Studies and Gerontology, Waterloo, Canada

**Objective:** Little is known about HIV risk and protective behaviour among se- niors, information comes mainly from American research and Canadian MSM, HIV rates are increasing in Florida; Canadians who winter there are very so- cial. Yet we know little of their social and sexual interactions with Floridians—or their awareness of sexual risks, home and abroad. This presen- tation identifies the sexual-risk level of seniors and predictors of sexual-risk communication with a doctor.

**Methods:** A cross-section of snowbirds were surveyed (N=299). Eligible par- ticipants were: aged 50+, visited Florida – past 12 months, stayed for 1+ months, and live in Canada for at least 6 months each year. Multivariate logistic regression analysis assessed factors associated with risk communication with a physician.

**Results:** 7.2% of 299 snowbirds reported talking with a doctor about sexual risk since age 50, even though they were the preferred source of information (49%). 23.1% were sexually active with dates (including 10% of the married); 3.3% of the married and 17% of daters reported past year condom use. Those who spoke to a doctor were unmarried (OR=8.4), 4.5% of the past 5 years (OR=2.2), and had a STI in the past 5 years (OR=3.5). Talking to a doctor about sexual risk was decreased (OR=0.16) for seniors reporting sex in a dyadic context.

**Conclusion:** When sex was mentioned to physicians, it was most often re- garding sexual dysfunction, yet doctors did not concurrently address potential risk. Seniors are sexually active, and risk rises as they begin to date following the death of a partner. This research supports the need for a renewed educa-

**WEPE0416** Do senior citizens talk to their doctors about sexual risk? Results from the Canadian snowbird study

Integration of HIV prevention and other health programmes
WEPE0419
Incorporating HIV/STI prevention and testing messages with the dispensation of emergency contraception - utilizing pharmacists as partners in HIV prevention

M. Goodspeed1,2, J. Cooper1, M. Brown3, K. Watson4, M.E. Wilber5
1 Erie County Medical Center, Immunodeficiency Services, Buffalo, United States, 2NYS Prevention Planning Group, Albany, United States, 3AIDS Institute, Albany, United States, 4American Red Cross, Buffalo, United States, 5Prevention Planning Group, Albany, United States, 6Prevention Planning Group, Immunodeficiency Services, Buffalo, NY, United States

Issues: Women accessing Emergency Contraception (EC) are at risk for HIV/STI transmission, dispensation of EC is a missed opportunity for HIV/STI Testing messages

Description: Extensive research on EC and related issues was conducted that included:
- Indications for use of drug, legal rulings and restrictions, effectiveness of treatment and product information currently available
- Phone surveys were performed throughout New York State (NYS). They examined the availability of the medication, cost, and EC knowledge of the responder
- Review of the State Education Department mailings to all NYS Pharmacies

Next steps: The NYS Testing Phone Service has established a tracking code linking SRH within HIV/AIDS prevention.

M. Goodspeed1,2, J. Cooper1, M. Brown3, K. Watson4, M.E. Wilber5
1 Erie County Medical Center, Immunodeficiency Services, Buffalo, United States, 2NYS Prevention Planning Group, Albany, United States, 3AIDS Institute, Albany, United States, 4American Red Cross, Buffalo, United States, 5Prevention Planning Group, Albany, United States, 6Prevention Planning Group, Immunodeficiency Services, Buffalo, NY, United States

WEPE0420
Sexual and reproductive health (SRH) needs of female sex workers (FSWs), Karachi, Pakistan - linking SRH within HIV/AIDS

I.B. Syed1, B.S. Solangi1, Greenstar Social Marketing, Karachi, Pakistan, 2United Nations Population Fund, Islamabad, Pakistan

Background: Pakistan, currently experiencing a concentrated HIV epidemic among injecting drug populations, primarily IDU and Hijra sex workers (Transgenders). While HIV prevalence among female sex workers (FSWs) and their clients, being the major driver of the epidemic, they are more vulnerable to related health and social problems.

Methods: The study employed rapid ethnographic assessment (REA). Focus Group Discussions and using semi structured interviews, with 450 FSWs, recruited by purposive sampling. Based on the assessment, SRH information and services were offered to FSWs through peer educators and drop-in centers.

Results: Twelve peer groups were formed, led by a peer educator, trained and responsible for implementing various empowerment activities. The results indicated that 57% had availed themselves to HIV antibody testing, just 12.7% who had ever had a pap smear. 53% FSWs received STIs treatment, while 47% FSWs had experienced different forms of SRH related problems, including abortion (37.8%) and only 23.9% had ever been for contraception provision.

Conclusions: The dedicated HIV services for FSWs, included SRH, with a systematic follow-up linking clinic with outreach, contributed to increased identification and utilization of SRH services, including STIs. The strategy can be used for improving health care services for FSWs.

Presenting author email: marygoods@hotmail.net

WEPE0421
Factors associated with acceptability of an intervention (Project IMPACT) for HIV-uninfected men who have sex with men (MSM) presenting for integrated treatment of crystal methamphetamine abuse and HIV risk reduction counseling

B. Perkovic1, M.J. Milimaga1,2, S.L. Reisner1, D.W. Fantalone1, C. O’Clerigh1, K.H. Mayer1, S.A. Safren1
1 Fenway Community Health Center, Boston, United States, 2Harvard Medical School/Massachusetts General Hospital, Boston, United States

Background: Globally, crystal methamphetamine (“meth”) use among men who have sex with men (MSM) has been highly associated with increased HIV sexual risk behavior. Enhancing the acceptability of interventions for HIV-uninfected MSM presenting for treatment may improve the effectiveness of these programs in decreasing meth use and sexual risk for HIV-infection.

Methods: In 2009, post-treatment qualitative exit interviews were conducted with 17 HIV-uninfected MSM with meth abuse/dependence who completed a 12-session, pilot trial of behavioral activation therapy and HIV risk reduction counseling. The intervention was geared toward reengaging men in life activities without the need to use meth and, by treating stimulant-associated depression, increasing the effectiveness of sexual risk reduction counseling.

Results: Exit interviews assessed intervention strengths, areas for improvement, and ways to enhance intervention acceptability.

Conclusions: Participants strongly endorsed the intervention model. Several HIV prevention concerns were identified:

1. Concerns regarding the acceptability of intervention:
   - Integration of intervention into daily life: weekly meetings with therapists, reminders, tracking activity logs (syllable), and regular homework were cited as important in helping to bring the intervention into the fold of daily life and providing a structure in which to meet behavioral change goals.
   - Visual aids: activities with visual aids depicting benefits and risks of substance use and sexual risk behaviors were reported to be especially effective.
   - Monetary incentives: participants reflected that the effectiveness of any intervention hinged on the individuals’ dedication to getting clean, but that monetary incentives proved essential to retention.
   - Need for MSM cultural competence: culturally competent facilities and providers experienced at serving MSM with substance abuse/dependence were uniformly described as very important.

Lessons learned: Meth-dependent MSM seeking substance treatment respond favorably to interventions emphasizing: life structure, pleasurable activities without meth, and visualization of the impact (potential & real) of high-risk sexual behavior and substance use, and offer monetary incentives for participation.

WEPE0422
STI/HIV prevention mainstreaming and scaling up within literacy curricula in Morocco

N. Sarhani1, M. Esskanaoui2,1, A. Latif1, E.M. Lamaddam1, R. Akerbi1
1 Association Marocaine de Solidarité et de Développement, Rabat, Morocco, 2Direction de Lutte contre l’Analphabétisme, Rabat, Morocco

Description: MSF, supported by the United Nations Development Programme (UNDP) and the United Nations Population Fund (UNFPA), in collaboration with the Ministry of Health and Development, has developed and implemented a STI/HIV mainstreaming program for illiterate girls and women (YGW). There is the urgent need for mainstreaming STI/HIV prevention as an important strategy and effective intervention to reach out for better coverage and building capacity for YGW through a literacy program to reduce their vulnerability to these infections.

Methods: The MSF program includes the following activities:
- Conducted a Knowledge, Attitudes and Practices (KAP) baseline study among illiterate YGW to assess their STI/HIV prevention knowledge.
- Developed a module on STI/HIV prevention for integration within the curricula.
- Developed a curriculum for the STI/HIV module for integration within the curricula.
- Implemented the module within the national curricula.
- Documented and assessed the mainstreaming process.

Lessons learned:
1. Multi-sectoral partnership, common vision, coordination and systematic communication between different stakeholders are necessary to achieve the HIV prevention mainstreaming process.
2. The baseline study is very important because it is the foundation for developing an intervention strategy based on specific needs expressed by illiterate women.
3. Documentation and learning from the process is essential for replication and scaling-up of HIV/AIDS prevention in development programs.

Next steps: To continue the Mainstreaming HIV/AIDS prevention process in the national literacy program by:
1. Developing a curriculum for the STI/HIV module for integration within the curricula.
2. Organising regional trainings for local facilitators delivering literacy program for illiterate YGW.
3. Producing a new national curriculum integrating the module.

Presenting author email: safarhaniga@un.org.pk
WEPE0423
Rural outreach - alternative model for sustainable targeted intervention (TI) for high risk groups (HRGs) in India

N. Chauhan
National AIDS Control Organization, Ministry of Health & Family Welfare, New Delhi, India

Issues: It is an interesting irony that in the developing countries like India with 3/4th of its population still living in rural areas (Census 2001), all the key prevention strategies for HRGs (Female Sex Workers, Men Who Have Sex With Men & Injecting Drug User) concentrate in urban areas. But the urban TIs were unable to address the issues related to migrants and floating HRG population. This led to the need for exploring cost-effective models for reaching the remote population. Also, the pilot rural outreach model in 30 districts identified large number of HRGs i.e., approx 60,000 in 30 districts [Source: Rural Mapping CMS] not receiving any of the HIV-related services.

Description: In India, 2/3rd of the urban population lives in 23 major cities, primarily due to established migration routes between the source and the destination settings. These migration patterns should continue with the existing focused TI programmes. Alternatively, using the rural prevention model in smaller cities ensures better outreach to HRG/migrants/truckers and their clients/partners. This unlike the urban TIs, along with HRGs, ensures sensitization and awareness generation of wider span of people, and therefore promotes enabling environment for accessing and practising the HIV-related services.

Lessons learned: The proposed rural intervention aims at strengthening the health system and infrastructure, which in turn will ensure non-isolated HIV services and convergence of health services.

Next steps: The involvement of community in designing and implementing the proposed model in the most vulnerable villages (100-120) of a district affirms the sustainability and acceptability of the rural outreach model.

Presenting author email: nehanaco@gmail.com

WEPE0424
Baseline study on knowledge, attitudes, and practise (KAP) in STI/HIV prevention of illiterate young girls and women

N. Sarhan1, N. Benajiba2, M. Essaikni2, R. Amghar3, H. Elmadi4, N. Chauhan5, A. Machkour5, A. Mouine5,
1Association Marocaine de Solidarité et de Développement, Rabat, Morocco, 2Direction de Lutte Contre l’Analphabétisme, Agadir, Morocco, 3Association Echo pour Solidarité et Développement Rural, Beni Mellal, Morocco, 4Association Kaza za pour le Développement Rural, Beni Mellal, Morocco

Background: The feminization of HIV/AIDS has been demonstrated at both international and national levels. In Morocco, about 40 % of infected persons are women. Furthermore, STI prevalence remains high particularly among Moroccan women at reproductive age. The lack of information on the specific needs of this population to address STI/AIDS limits the ability to develop a comprehensive strategy. Thus, it was necessary to conduct a baseline study on the STI/HIV prevention Knowledge, Attitudes, and Practices (KAP) of illiterate YGW (young girls and women) to:

- Assess their STI/AIDS prevention needs
- Identify strategic orientations to be integrated into prevention development programs
- Determine the appropriate STI/HIV information that needs to be integrated in the national literacy curricula delivered to illiterate YGW

Methods: AMSED, in partnership with the Ministry of Health, Direction of Fight against Illiteracy (DLCA) and Focal Intermediate NGOs carried out a KAP study in STI/HIV prevention in 3 regions of Morocco. The target population was illiterate YGW at reproductive age (15–49 years). Quantitative data were collected through individual interviews of 630 women; and qualitative information was collected through 15 focus groups representing 152 women.

Results:

1. In general, women had poor and erroneous information on STI/HIV.
2. STI medication was based on either personal experience or culturally available information. Healthy behavior adopted by these women was over controlled by socio-cultural determinants.
3. Men were seen as victims of any STI/AIDS infection even if they were the vector if it.

Conclusion:
1. Capacity building of women in sexual health and reproduction, negotiation skills, orientation and counselling were identified as strategic intervention domains to be developed.
2. The Rights and Gender approaches should emphasize STI/HIV prevention programs targeting women.

Presenting author email: sarhaninjate@hotmail.com

WEPE0425
HIV prevention for people who use drugs: studying the opportunities of integrating prevention programs and the activity of social, medical and other services

L. Khalidova1, E. Savichyna2, I. Jakabose2
1Prevention and Initiative, Kazan, Russian Federation, 2Government of Tatarstan Republic, Anti-Drugs Committee, Kazan, Russian Federation, 3UNODC in the Russian Federation, Moscow, Russian Federation

Issues: In May 2009 a Low-threshold Center for injecting drug users (IDUs) was set up and in Novo-Savinovsky District, Kazan on an integration model of HIV prevention for people who use injecting drugs. The narcology service of the Novo-Savinovsky district (total pop. 200000) lists 738 registered IDUs, 260 (35,2%) of whom are HIV-infected. According to various studies, the real number of IDUs is 4 to 6 times as high. Low-threshold center have the widest coverage of IDUs with high percentage of HIV infection and lowest socialization level. For HIV prevention to be effective, we need both access to other categories of IDUs and expansion of prevention venues.

Description: In 2009 a survey was held for 32 members of 10 organizations. The aim was to check for needs, opportunities and required resources for implementing HIV prevention programs at those organizations which experience daily contact with drug users without getting involved in HIV prevention. We also held talks with government agencies to prepare groundwork for program integration in the field, which allowed us to single out some agencies where implementing prevention programs for new IDUs groups are possible.

Lessons learned: We have created an integration model of HIV prevention among IDUs, which includes the following venues: 1. Out-patient narcology clinic. Prevention of risky injection behavior can take the form of short-term interventions. 2. Police stations. NGO consultants work with the offenders. (UNODC project, active since September 2009). 3. Social workers get in contact with IDUs in the course of their patridge on problem families. This will allow to involve previously uncovered groups of IDUs, including women. 4. Self-help groups of addicts’ relatives.

Next steps: Currently we are implementing HIV prevention programs for IDUs at the narcology clinic and social care institutions. The implementation will not incur either personnel boost or high spending.

Presenting author email: razhy.sadykova@tatar.ru
Specific issues in prevention, treatment, care and support with women and girls WEPE0427-WEPE0449

WEPE0427
Heterosexual anal sex is associated with HIV sexual risk behavior, sexual identity, and decision-making behaviors and cognitions in women G. Reynolds1, D. Fisher2, L. Kilp Napper2, L. D’Amico3, California State University, Health Care Administration, Long Beach, United States, 1California State University, Long Beach, United States

Background: The relationship between anal sex and increased HIV risk is well-accepted for men who have sex with men, but little is known about this relationship for women. Heterosexual anal sex (HRAI) is poorly understood, under-reported, and often stigmatized as a non-normative heterosexual behavior. Our study investigates the relationships between HRAI, HIV risk, and sexual and drug risk-taking behaviors and cognitions in women.

Methods: 829 women, of whom 193 (23%) reported HRAI, completed behavioral assessments and received HIV, hepatitis, syphilis, gonorrhea, and chlamydia testing. The ethnically and racially diverse study population was recruited in Long Beach, California. Measures included: Risk Behavior Assessment; Sexual Sensation-Seeking Scale; Sexual Compulsivity and Nonsexual Experience-Seeking Scales; Barratt Impulsivity Scale (BIS); Sexual Stages of Change Readiness and Treatment Easiness Scale; Women’s Sexual Addiction Screening Test (w-SAST); Eysenck Impulsivity Scale (EIS), and the Compulsive Sexual Behavior Inventory (CSBI).

Results: Compared to those who did not report HRAI, women who reported HRAI had: significantly higher HIV prevalence (c(269)=4.67, p<.03); higher mean number of days using alcohol, crack, powdered cocaine, heroin, speed, ball and amphetamine; higher mean scores on the sexual sensation seeking/ non sexual sensation seeking scale (t(188)=4.15, p<.001); higher mean scores on the BIS (t(276)=3.55, p<.0005); higher mean scores on the EIS (t(230)=2.91, p=.004); higher mean scores on the w-SAST (t(262)=4.69, p<.0001); and higher mean scores on the CSBI (t(155)=2.54, p=.01).

Conclusions: HRAI is associated with drug use, sexual sensation seeking, sexual addiction and sexual compulsivity in women. Thus, HIV risk profiles for women are complex and future HIV research and prevention efforts should incorporate multi-dimensional measurements of risk behaviors and cognitive factors. Presenting author email: ldanna@csulb.edu

WEPE0428
Role of self-efficacy in HIV prevention efforts with women S. B. Nicholson1,2,3 Gaston County Health Department, Community Health Education, Gastonia, United States

Issues: Many studies have proven the importance of self-efficacy - one’s belief in his or her ability to achieve certain goals - in health interventions and the role it plays in enabling people to achieve positive behavior changes. Research has shown that interventions which empower women by addressing self-efficacy for protective behaviors are more likely to be successful. In 2004, the NC Department of Health and the CDC conducted an investigation of risk factors among HIV-positive women in North Carolina and found one of the most common risk-factors is low self-esteem. Understanding low self-esteem can reduce self-efficacy, an intervention was developed to educate women on personal risks and empower them to make healthy changes.

Description: Adapted from the Partners in Prevention intervention, “My Children, My Sisters, Myself” (MMSG) was designed to reduce the incidence of HIV among women who are young and have less education, their socio-cultural environment and the type of leisure pursuits that is prior to 25 years. These wahine share insights into their lifestyles, their education, their socio-cultural environment and the type of leisure pursuits they participated in at the time of infection.

Lessons learned: Limited contextual education about sexuality and reproductive health, the place of alcohol, drugs, and parties in decision making, low levels of educational performance at secondary school; sexual naïvety; sense of cultural identity, reliance on mythology about HIV/AIDS, and its infection, with particular relevance to self and cultural power-relational status all contributed to an increased risk of HIV infection.

Next steps: The commonalities of experience are highlighted in constructed shared narratives to demonstrate to those with responsibility for education - prevention and intervention, that these commonalities should be considered in the preparation and provision of culturally responsive HIV & AIDS awareness intervention/prevention programmes for rangatira Māori wahine. Presenting author email: lisa@wakaito.ac.nz

WEPE0429
‘She is like my family here...’ reliance on formal care providers for social and emotional support by HIV-positive women living in Toronto S. Stranks1, T. Daly1, M. Halman1,2,3, I. Maggi4,5,6
1London School of Hygiene & Tropical Medicine, Public Health, London, United Kingdom, 2St. Michael’s Hospital, HIV Psychiatry Program, Toronto, Canada, 3York University, School of Health Policy and Management, Faculty of Health, Toronto, Canada, 4Koenen Research Centre in the Li Ka Shing Knowledge Institute, St. Michael’s Hospital, Toronto, Canada, 5University of Toronto, Faculty of Medicine, Toronto, Canada, 6Centre for Research in Inner City Health (CRICH), St. Michael’s Hospital, Toronto, Canada, 7Women’s College Hospital, Department of Psychiatry, Toronto, Canada

Background: A growing body of literature describes the stigma associated with HIV status as well as the stress it often creates for those infected. The aim of this study was to understand the ways that stigma may influence how HIV+ women living in an urban setting and coming from diverse backgrounds experience and cope with their illness. The objectives included: 1) To describe the experiences HIV+ women have with stigma - both feared and actually experienced - as a result of their HIV status, 2) To examine the strategies HIV+ women have developed with cope with their illness and 3) To explore why HIV+ women favour certain coping strategies.

Methods: 30 HIV+ women were recruited from three healthcare settings in Toronto, Canada between 2006 and 2008. In-depth semi-structured in-depth interviews were conducted and clinical screening tools were used. Allbatim transcribed interview data were thematically analyzed using NVivo 7 and univariate analyses were conducted of the quantitative demographic and clinical data using SPS 16.

Results: Women in this study described their experiences with stigma as one of the most stressful aspects of living with HIV. To cope, women often chose to significantly limit the number of people in their lives aware of their HIV status. This frequently resulted in a drastic reduction in their access to essential social and emotional support from informal sources, such as friends or family, and a shift towards reliance on formal care providers as a source of support, such as healthcare workers and community programs.

Conclusions: This research highlights how stigma remains a stressful reality in the lives of many HIV+ women. Specialized services targeting HIV+ women who lack sources of informal support are urgently needed as is research that explores strategies to normalize HIV that may allow HIV+ women to disclose their status to the people closest to them. Presenting author email: sarah.stranks@gmail.com

WEPE0430
Rangatahi wahine Māori story their experiences L. Hayes1,2,3
1University of Waikato, Sport & Leisure Studies, Hamilton, New Zealand, 2YWCA of Aotearoa New Zealand, Wellington, New Zealand, 3INA HIV/AIDS Foundation, Tirau, New Zealand

Issues: The literature from such organisations as the International Coalition of Women and AIDS suggest that HIV infection amongst young women can be attributed to factors such as power inequality, illiteracy, poverty, lack of culture, limited education, and gender violence and abuse. When developing educational intervention and prevention programmes the organisation and/or individual designing programmes must accurately identify those possible social, medical and cultural risk factors that increase the infection risks. Not all factors increase the infection risk across all groups of women.

Description: Although the numbers of Positive Māori wahine are relatively low when compared to that for other First Nations peoples, the numbers are estimated to decrease, with Māori wahine identified by the WHO as one of Oceania’s more vulnerable populations. This study gives voice to a group of Positive Māori wahine (women) who were all infected as rangatangi (youth), that is prior to 25 years. These wahine share insights into their lifestyles, their education, their socio-cultural environment and the type of leisure pursuits participated in at the time of infection.

Lessons learned: Limited contextual education about sexuality and reproductive health, the place of alcohol, drugs, and parties in decision making; low levels of educational performance at secondary school; sexual naïvety; sense of cultural identity, reliance on mythology about HIV/AIDS, and its infection, with particular relevance to self and cultural power-relational status all contributed to an increased risk of HIV infection.

Next steps: The commonalities of experience are highlighted in constructed shared narratives to demonstrate to those with responsibility for education - prevention and intervention, that these commonalities should be considered in the preparation and provision of culturally responsive HIV & AIDS awareness intervention/prevention programmes for rangatira Māori wahine. Presenting author email: lisa@wakaito.ac.nz
WEPE0431
Gendered neglect: does research published in the journal of the international AIDS society, 2005-2009, disaggregate findings by sex and discuss implications for women?
F. Hale1, E. Collins1, L. Binder2,*, L. Gahagan3, T. Crane4
1Salander Trust Associates, London, United Kingdom, 2University of Toronto, Department of Psychiatry, Toronto, Canada, 3International Community of Women Living with HIV - North America, Toronto, Canada, 4Blueprint for Action on Women and Girls and HIV/AIDS, Toronto, Canada, 5Athena Network, Seattle, United States

**Issue:** The International AIDS Society, and its Journal of the International AIDS Society (JIAS), seeks to ‘‘improve the dissemination of high-quality medical evidence from research conducted in a variety of geographic, cultural, socioeconomic, and clinical settings.’’ HIV has a disproportionate impact on women, yet there is concern that research consistently fails to acknowledge this fact and to specify the implications of findings for women.

**Description:** All papers published in the Journal of the International AIDS Society 2005-2009 were reviewed using content analysis. Those reporting research with human subjects were analysed for: a) percentage of sample made up of women; b) disaggregation of results by sex; and c) discussion of potential implications of findings for women. The findings are summarised in the table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Research on humans</th>
<th>Sample &gt;50% women</th>
<th>Results disaggregated by sex</th>
<th>Implications of findings for women</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>19</td>
<td>11 (58%)</td>
<td>6 (32%)</td>
<td>3 (26%)</td>
</tr>
<tr>
<td>2008</td>
<td>37</td>
<td>22 (33%)</td>
<td>2 (67%)</td>
<td>19 (123%)</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (50%)</td>
</tr>
<tr>
<td>2006</td>
<td>6</td>
<td>1 (17%)</td>
<td>1 (17%)</td>
<td>1 (17%)</td>
</tr>
<tr>
<td>2005</td>
<td>8</td>
<td>1 (13%)</td>
<td>4 (50%)</td>
<td>3 (38%)</td>
</tr>
</tbody>
</table>

**JIAS papers by year**

**Lessons learned:** Even when women constitute a significant percentage of the sample, serious questions about the direct relevance to women of research presented as results of aggregated results by sex and gendered discussion of the findings.

**Notes:** Reporting the male/female ratio of a sample is no longer enough. JIAS publication criteria, and those of other journals, must include disaggregation of results and explicit discussion of implications of findings for women and girls.

Research must address the fact that HIV disproportionately affects women. We call on The Journal of Women and HIV to encourage researchers to directly address issues of HIV and women.

Presenting author email: nuhakamal@hotmail.com

WEPE0432
Immune to HIV? Housewives believe they are. A household survey in Khartoum North, Sudan
N.K.A. Ahmed1, S. Kanani2
1University of Medical Sciences and Technology, Khartoum, Sudan, 2Ministry of Health, Khartoum, Sudan

**Background:** This study aims to assess HIV knowledge, attitude and prac- tices among housewives: a social group not often targeted perceived to be at risk. However, research conducted in developing countries indicate that HIV-positi- vely married women were likely to have been infected by their husbands. We hypothesised that housewives in Khartoum North may believe themselves not to be at risk of HIV. This false sense of security would negatively affect their practice, possibly increasing their risk of infection.

**Methodology:** In February 2009, a complete coverage cross-sectional household survey was conducted in two randomly chosen districts in Khartoum North. 260 housewives aged between 15 and 49 years were interviewed using a semi-structured questionnaire. Data was analysed using SPSS.

**Results:** 56.6% of housewives believe that it is impossible for them to ac- quire HIV, despite 98% admitting that HIV can be transmitted between spous- es. Although 57.5% knew that condoms are protective, only 6.5% mentioned condom-use as a preventive measure while 40.7% mentioned intra-martial sex. 88% did not know specifically what VCT was, and only 27% knew the location of a centre. Although 88% say that HIV testing is important for every- one, only 45% are willing to test and only 8% have tested before. 57% of housewives are currently practicing some form of family planning but only 2% are using condoms. Television was the main source of HIV information for 64% of housewives.

**Conclusions:** Despite their knowledge, housewives continue to believe that marriage offers them complete protection against HIV, thus eliminating their need to adopt preventive measures. Future objectives should aim to: Educate housewives with sufficient knowledge, enabling them to assess their HIV risk accurately. Increase their husbands’ awareness, encouraging wives to discuss VCT and condom-use with them openly. Actively promote VCT, thus removing preconceptions and allowing spouses 90% for HIV more willingly.

Presenting author email: nuhakamal@hotmail.com

WEPE0433
Gendered neglect: how relevant is HIV research to women?
F. Collins1, F. Hale1, J. Gahagan3, L. Binder2,*, T. Crane4
1University of Toronto, Department of Psychiatry, Toronto, Canada, 2Salander Trust Associates, London, United Kingdom, 3Dalhousie University, School of Health and Human Performance, Halifax, Canada, 4Blueprint for Action on Women and Girls and HIV/AIDS, Toronto, Canada, 5Athena Network, Seattle, United States

**Background:** There is concern over lack of research relevant to women. To assess we analysed all 2009 articles published in the Journals AIDS and the Journal of International AIDS Society (JIAS). These journals were selected for their high impact factors and affiliation with the IAS, the custodian of AIDS2010.

**Methodology:** Editors, research papers, brief reports and letters were read and scored on relevance to women based on operational criteria evaluating a) issue being studied; b) percentage of females in the sample; c) whether results were disaggregated by sex; d) whether implications for women were explicitly discussed.

Articles were categorized as Relevant; Potentially Relevant; or Questionably Relevant. We also recorded scientific focus, and, for studies among humans, details on study samples.

**Results:** 449 articles were published in 2009 (45 in JIAS and 404 in AIDS). Of these, 87 (19.4%) were Basic Science: 174(38.8%) Clinical; 103(22.9%) Epidemiology/Prevention; 25(5.6%) Socio-Behavioral; 28(6.2%) Economics/ Operations Research; and 32(7.1%) Policy. Fifty-five studies (18.9%) were rated Relevant; 112(24.9%) Potentially Relevant; and 252(56.1%) Questionably Relevant. Socio-Behavioral studies had the highest relevance ratings, and Basic Science the lowest. The 55% of studies in human subjects were only women and 40 men only. Of the 167 mixed sample studies, 43(25.7%) had no breakdown by sex and of the 124 that did, mean percentage of female subjects was 32.9% with 55.7% disaggregating results by sex. Only 3 studies listed transgendersubjects.

**Conclusions:** Despite the global epidemic reaching parity between both men and women, only <20% of published studies in two major journals were clearly relevant to women. In addition to the critical need for more research relevant to women and HIV, more could be done to increase relevance. At minimum, editors and conference organizers should mandate breakdown of samples and disaggregation of results by sex, and explicit discussion of the implications of research findings for women.

WEPE0434
HIV prevention among migrant women in six Chinese cities
V. Zhang
AIDS Policy Research Institute, Tsinghua University, Beijing, China

**Issues:** China has been experiencing a great rural-to-urban population shift in the last 20 years. Now more than 210 million rural residents have become migrant workers in urban areas. About 70 million of these are women at the child-bearing age. Their HIV risks include casual sex, lack of knowledge about reproductive health and, above all, a thriving sex industry that lures desper- ate women from rural areas to engage in Commercial sex. In the last two years, a joint program was launched in six cities to educate migrant women about HIV risks. Led by Tsinghua University and sponsored by Johnson & Johnson, the program approached women working in bars and nightclubs, massage parlors, beauty salons, and market places. A "sensitivity model” was adopted in response to these women's self identity and work environments.

**Description:** Specific prevention strategies were tailored to differences in edu- cation attainment, work environments, lifestyles, and social networks. Local governments, chambers of commerce, small business owners, and medical practitioners were mobilized so as to ensure that women’s participation in HIV education would not be stigmatized. A special and consistent effort was made to identify and train peer educators among women who already had a leader- ship status among co-workers or were extremely eager to become activists.

**Lessons learned:** HIV prevention must be built on respect and empower- ment. At-risk populations must be given a greater role to play in developing prevention strategies in ways that they have to consider as effective and appropriate. This applies to issues of organization, curriculum development, language to be used, and messages to be delivered. Above all, HIV prevention among migrant women must be combined with their concerns for health in general and reproductive health in specific.

**Next steps:** An effort to further identify HIV risks among Chinese migrant women is under way.

Presenting author email: healthpolicy@tsinghua.edu.cn

WEPE0435
Where are the men? Strategies to engage men as active partners in care of women living with HIV in Northern Nigeria
P. Suntan1, O. Salami2, O. Iyaji-Paul2
1Management Sciences for Health, LMS/PROAct, Abuja, Nigeria, 2Management Sciences for Health, PROACT, Abuja, Nigeria

**Issues:** Women living with HIV/AIDS are experiencing high levels stigma and discrimination and burden of care for infected persons in their communities. These have far reaching effects on the health and well-being of these communities. While most of the patients testing positive to HIV in our facilities are women, there exist, women gaps in the uptake and utilization of some treatment services which can be ascribable to lack of male partners’ support.

Presenting author email: healthpolicy@tsinghua.edu.cn
WEPE0436

Differences in sexual risk behavior and HIV/AIDS risk factors among foreign-born and US-born Hispanic women in the United States

J. Castillo-Mancilla, A. Alishouse, C. Collins, M. Hastings-Tolmá, T. Campbell, S. Maslachney
University of Colorado Denver, Colorado Infectious Diseases, Aurora, United States; University of Colorado Denver, Biostatistics and Informatics, Aurora, United States; University of Colorado Denver, College of Nursing, Aurora, United States

Background: The rate of HIV/AIDS diagnosis is higher for Hispanic women than for White women in the United States (US). HIV prevention strategies do not address the differences in risk behaviors between foreign-born (FBHW) and US-born Hispanic women (USBHW). The objective of this study was to identify differences in behavioral risk factors between FBHW and USBHW.

Methods: An anonymous, self-administered, 27-item questionnaire (some with multiple outcomes) spanning six categories (demographics, sexual history, condom use, HIV/STI diagnosis, partner risk and alcohol/substance use) was administered to 330 sexually active Hispanic women. Fisher’s exact and two-sample t-tests were used. A Bonferroni-corrected significance level of 0.003 (0.05/50) was used for secondary outcomes.

Results: 124 FBHW and 86 USBHW from women meeting eligibility criteria were evaluated. For the primary outcome, FBHW were older than USBHW (38.5 vs. 32.5 years; p<0.001). There were no differences in HIV/STI diagnosis or partner risk. Alcohol/substance use was administered to 330 sexually active Hispanic women. Fisher’s exact and two-sample t-tests were used. A Bonferroni-corrected significance level of 0.003 (0.05/50) was used for secondary outcomes.

Conclusions: Differences in sexual risk behavior and HIV/AIDS risk factors among FBHW and USBHW were noted. Future research should address the factors that contribute to these differences.

WEPE0437

The Faithful House: effectiveness in challenging gender norms for the reduction of multiple and concurrent partnerships

D. Brewster-Lee, M. Teilila, A. Clark, D. Belay
Addis Ababa, Ethiopia

Background: The Faithful House (TFH) is a curriculum encouraging couples to “Be Faithful” by challenging social and cultural gender norms and building skills in interpersonal communication for positive behavior change. In two years, Catholic Relief Services (CRS)-Ethiopia has trained 1,618 people using TFH; these couples have reached 8,942 couples with TFH.

Methods: Before and after three TFH workshops, surveys were administered and disaggregated by gender. Given that gender differences in age and education are a common marital dynamic in Ethiopia, the evaluation aimed to explore sex differences in behavior change following participation in TFH; how do men and women differ in reported changes?

Results: Wives were younger (mean=8 years) and less educated (74% of men vs. 56% of women had an 8th grade education) compared to husbands (77% vs. 79%; p<0.01). Both groups reported increased rates of condom use (71% vs. 77%; p=0.04). Participants who sought adequate skills to remain faithful in marriage increased from 78% to 99% (p<0.005). Significant changes were reported by both men and women’s attitudes:

- Pre-test 36% said partner was responsible for household responsibilities; post-test, 94% said that both were responsible.
- Attitudes toward giving money; 31% to 97%.
- Joint decision making about sexual activity increased from 12% to 94%.

Lessons learned: The strategy was successful in changing these attitudes, women were more likely to report these attitude changes:

- HIV testing for self increased from 38% to 92% and for spouse from 9% to 94%.
- Their ability to talk to their kids about sex increased from 16% to 91%. Men reported significant increases (26% to 97%) in their attitude about discussing finances with their wife.

Conclusions: Though these differences of age and education remain static over the marriage, the training was still able to change other culturally determined values such as finances, childcare responsibilities, and communication.

WEPE0438

The relationship between self-esteem and HIV-stigma, sexual assertiveness, and self-silencing in women aged 50 and older at risk for HIV

R.J. Jacobs, M.N. Kane
Nova Southeastern University, Preventive Medicine & Psychiatry and Behavioral Medicine, Ft. Lauderdale, United States; Florida Atlantic University, Social Work, Boca Raton, United States

Background: The number of women in the United States aged 50 and older with HIV is increasing yet little is known about psychosocial factors that could influence their sexual risk. Evidence suggests that self-esteem is linked to risky behaviors in other populations but has not been examined in women over 50. The purpose of this study was to explore how self-esteem is related to HIV-stigma and other variables that can influence risky sexual behaviors.

Methods: A multiethnic community-based sample of 572 women aged 50–93 (M=63.6 years; SD=10.5) in South Florida were recruited from community venues (e.g., social clubs, health clinics) to complete an anonymous, paper and pencil questionnaire. The study used a cross-sectional research design to report demographic characteristics, sexual behaviors, and psychosocial variables measured with the AIDS-Related Stigma Scale, Sexual Assertiveness Scale, Rosenberg Self-esteem Scale, Sensation Seeking Scale, and Socioemotional Scale. Correlation and regression analyses were used to determine the influence of the abovementioned variables on the self-esteem of women aged 50–93.

Results: Subscores for sexual assertiveness (Information Communication, Initiation, and Refusal) and self-silencing (Externalized Self Perception, Care for Self Sacrifice, Silencing the Self, and Divided Self) proved to be useful correlates in understanding self esteem. The final model for this analysis (F=43.631, p<0.001) included the predictive variables of Sensation Seeking, HIV-related Stigma, Information Communication from the Sexual Assertiveness Scale, and Externalized Self Perception, and Divided Self subscales from the Silencing the Self Scale.

Conclusions: Women aged 50 and older continue to be sexually active and may be at risk for acquiring HIV. HIV-related stigma reduction and sexual assertiveness skill building strategies may help bolster self-esteem in women over 50 and may be useful components of risk reduction interventions for this underserved, at risk group.

WEPE0439

Successes and challenges in a complex care case management framework within the AIDS service organizations, that impact the quality of life of HIV-positive African women who are refugees and new immigrants resettling in Canada

G. Pisharody
Toronto People with AIDS Foundation, Benefits & Assistance Services, Case Management, Toronto, Canada

Issues: HIV-positive African women continue to be adversely affected in their lives while living as refugees and immigrants in Canada as a result of the socio-cultural and ethno-specific contexts they continue to live in and the support services that do not recognize or address those unique cultural norms or practices as part of their intervention strategies.

Description: AIDS Service Organizations try to focus on providing complex care and management to HIV-positive African women in mainstream communities in Toronto. Community based programs offer a range of services that are also primarily designed to meet the basic needs of HIV Positive refugees and immigrants. The specific needs of HIV Positive African refugee and migrant women must be considered to provide meaningful intervention programs that address the complexity of the concerns of that specific population. The capacity of community based ethno-specific supports are looked at, to inform program architects of the lessons learned, by service providers of the community based agencies.

Lessons learned: The Complex Care and Case Management Framework examines the existing inclusive intervention programs for HIV Positive African Women in AIDS Service Organizations. Outcomes include the need for a better understanding with meaningful participation of African immigrant and refugee women, bound by ethno-cultural frameworks, appropriate program design with a focus on the distinct needs of this vulnerable population and a comprehensive strategy to meet their specific needs.

Next steps: The voices of HIV Positive African refugee and migrant women could be an inclusive part of relevant cultural and appropriate and adaptable program design processes thus identifying available supports and resources and underlying needs which are currently not addressed. Expressions of grassroots service providers will help bridge gaps between the complex care and management and the responsivness of service providers.

Presenting author email: rajsheeru_pisharody@yahoo.com
WEPE0440
Women’s action group...Chelsea, India: improved quality of life of girls/women

M. Manak
Women’s Action Group...Chelsea, HIV/AIDs, Delhi, India

Issues: In India the estimated 2.5 millions adults living with HIV/AIDS were comprised of 39.3% of these infections (NACO-2004-2005) for young women are expected to know little about sex and sexuality, also a culture of silence.

Description: Since 2002 USAID/FHI has been extending Financial/Techni-
cal support to WAG -CHELSEA for a Community Home Based Care (HBC) and Support programme to improve health status and quality of life of HIV orphans, vulnerable children and guardians from the marginalized sections of society, in nine slums of North East Delhi. The girl child is neglected from birth and is deprived of education, nutrition and health services throughout life. A total of 1027 beneficiaries registered in the programme till September 2009. 557 OVC and 470 of family members receiving palliative care, shelter care, nutrition and protection services. 263 girls and 255 infected af-
fected women received regular information and training from Social workers, Counselors, Community Volunteers, Peer Educators on HIV, HBC, affordable, accessible, low cost nutritious food and access to government treatment ser-
ves.

Lessons learned: 263 infected/affecteaffected girls accepted their own HIV status and that of their parents making them responsible care givers to their par-
ents and siblings while regularly attending school. This came about with the programme’s strong component of ongoing counselling and LIFE (Life Skills Education) interventions. 255 women of which130 are infected, of which only 57 are on ARV and 71 widows are maintaining good health status having been motivated through regular HBC and ongoing training programmes, they are determined to live healthy to look after their children.

Next steps: The programme is in its initial stages, clearly HBC and Support pro-
grames implemented by responsible, committed, accountable organiza-
tions demonstrate very positive responses and improves health status and the quality of life of girls and women. These interventions are sustainable and cost effective.

WEPE0441
Invisible women: a look at the global experiences and HIV risks of female injection drug users who engage in sex work

A. Roberts, B. Mathers, L. Degenhardt
National Drug and Alcohol Research Centre, University of New South Wales, Medicine, Sydney, Australia

Background: Female injection drug users (IDU) and sex workers (SW) are at risk of HIV acquisition and there is significant overlap between these popu-
lations. The majority of research on women has been conducted in developed country settings leaving a substantial gap in knowledge around the situation for female IDU SWs in the developing world, particularly in countries where injecting is emerging and SW is hidden.

Methods: A comprehensive global review of peer-reviewed and grey litera-
ture was undertaken on behalf of the Reference Group to the UN on the IDU to explore the interaction between IDU, SW and HIV risks in female IDU with a focus on the developing world.

Results: Evidence from multiple regions suggests engagement in either SW or IDU is a risk for engagement in the other. Both activities carry environmen-
tal and injection related HIV risks that exacerbate one another and increase risk of HIV acquisition. Female IDU SWs have different risk profiles from male IDU SWs. Female IDU SWs have detailed knowledge of the cultures and societal experiences of both IDU and SW and compounds these risks for female IDU SWs. Female IDU SWs are more likely to engage in risky injection behaviours and overall are more injection related problems than non-IDU SW and are more likely to engage in street based sex work than non-IDU SW.

Conclusions: The dual marginalization faced by SW female IDUs compound-
ed by the hidden and transient nature of these activities means their rights and needs are often overlooked by targeted interventions. Services designed for IDU should aim to meet the needs of SWs and vice versa. Research is desperately needed in developing country settings where injection is emerg-
ing to support policy development on the health, safety and human rights of this high risk population.

Presenting author email: anna.e.roberts@gmail.com

WEPE0442
Surgical sterilization among HIV-infected postpartum women in Pune, India

N. Suryavanshi, N. Gupta, S. Pathi, P. Moti, A. Gupta, R. Ballinger, A. Sambarey
“SWEN”-SWM Team India

‘IB Medical College & Sassoon General Hospitals, Pune, India, ’John Hopkins University- School of Medicine, Baltimore, United States, ‗John Hopkins School of Public Health, Baltimore, India.

Background: Contraceptive practices among HIV-infected women residing in low-income countries who have recently delivered are not well described. In India, surgical sterilization (i.e. tubal ligation [TL]) is the most common form of contraception used in women. The objective of our study was to compare contraceptive practices of HIV-infected women who underwent TL after delivery with those who did not.

Method: We analyzed data that were collected from women enrolled from 2002-2007 in a NIH-funded clinical trial assessing the efficacy of extended-
dose nevirapine given to breast-fed infants (SWEN trial) at Byramjee Jeejeeb-
hoy Medical College (BJMC), a government medical college in Pune, India.

Results: Of 725 women, 189 (26%) underwent TL a median 38 days (IQR 15-180) days post delivery, 172 had a TL within 8 days of delivery of which 23% had it post- Caesarean section. Women who underwent TL were slightly older (23 vs. 12 years, p= 0.004), less likely to be primigravida (7% vs. 47%, p<0.0001), less likely to be educated (35% vs. 23%, p<0.0005), more likely to have reported prior contraception use (17% vs. 9.7%, p<0.004), and more likely to have living children (86% vs. 51%, p<0.0001). During postpartum period those who underwent TL were less likely to use condoms (73% vs. 91%, p=0.001) and had more interurtal intervals but similar antenatal care and prior use of contraception had 78% greater likelihood of undergoing sterilization than women who did not (Odds ratio 1.78; CI: 1.04, 3.30; p = 0.025).

Conclusions: We found that age, education, gravidity, number of living chil-
dren and antenatal care combined with prior use of contraception influenced acceptance of sterilization. Women who underwent TL report less condom use but remain at risk for sexually transmitted illnesses (STIs). Contraceptive counselling services should ensure that TL is not perceived to be protective against STIs and HIV transmission. Presenting author email: vidyasa@gmail.com

WEPE0443
Women empowerment - a key sustainable results in the event of HIV and AIDS

A.C. Shula
ZAMAN, Programs, Lusaka, Zambia

Issues: Kilelabalanda Orphan and Widow Support affiliated to Society for Women and AIDS in Zambia (SWAAZ) was initiated by 48 women and 8 men with the aim of supporting orphans and women living with HIV/AIDS. The area of 560 households 300 of which are female-headed.

Deaths due to HIV/ AIDS resulted into an increase in the number of widows and orphans. The orphans in the number of orphans that were not going to school provoked the group to find ways of addressing the problem. This led to WEPE0440

Methods: Since 2007, WE-ACTx created a support group meeting for young girls once a week. This group includes female sexual abuse victims age 14-18 years. At WE-ACTx, the holistic biopsychosocial approach has been very helpful to patients. When working with these girls, we emphasize the psychological aspect through individual therapy, family therapy, group support and relaxation sessions, which are scheduled on a weekly basis.

Results: WE-ACTx provided financial support to the group to

• Rehabilitate the poultry house.
• Rehabilitate an old building into a community school.
• Procure sewing and knitting machines in order to expand the sewing and knitting IGA.
• Rehabilitate the poultry house.
• Engage in poultry production as an IGA.

Lessons learned:

• Given resources communities are able get organized and take care of their orphans and vulnerable children.
• Linkages help in resource mobilisation and technical gaps.
• Street kids of school going age can be rehabilitated and be enrolled in school and be educated up to secondary and even university level.

Next steps:

• Scaling up of support for sustainability is key to a better future
• Communities can do so much with so little resources

Presenting author email: agatha.shula@yahoo.com

WEPE0444
Sexual abuse in young girls in Kigali, Rwanda

H Mukanovsky
Women’s Equity in Access to Care and Treatment, Psychosocial Services, Kigali, Rwanda

Background: In Rwanda, the government is focusing on gender equality and issues in its peace and economic development initiatives. Gender plays an important role in the home, school, workplace, and community—and gender based violence impacts all these areas. A study of behavioral surveillance in 2006 conducted by the ministry of Sports and Culture showed that 12.1% of Rwandan girls reported having their first sexual relationships with a man at least ten years older. In a 2005 survey on demography and health, HIV prevalence was estimated at 1.4 % among women aged 15-24, a rate three times higher than among young men the same age. Poverty, abuse by family, gender inequality, coercion, and prostitution are all factors which increase the transmission of HIV in young girls. Psychosocial care is essential for outreach to and treatment of this vulnerable demographic group.

Methods: Since 2007, WE-ACTx took the initiative to educate teenage girls (14-18 years) who were sexually abused and infected with HIV. At WE-ACTx, the holistic biopsychosocial approach has been very helpful to patients. When working with these girls, we emphasize the psychological aspect through individual therapy, family therapy, group support and relaxation sessions, which are scheduled on a weekly basis.

Results: WE-ACTx created a support group meeting for young girls once a week. This group includes female sexual abuse victims age 14-18 years. These girls find this opportunity to share their experiences and express emo-
tions such as fear, anger, and shame help them feel released and reintegrated. Since 2007, the group has been more cohesive and girls have positively re-

Presenting author email: hennirol@yahoo.fr
WEPE0445

HIV clinical trials with women of color in mind - beyond getting them into trials

H. Kremer, M. Pur, G. Ironson
University of Miami, Miami, Psychology, Coral Gables, FL, United States

Background: Women of color (WoC), although comprising half of the HIV+ population worldwide, are underrepresented in clinical trials resulting in deaths among WoC. To examine motivators/barriers to trial participation, we conducted a survey of WoC the role of WoC in HIV/AIDS SUPPORT study, a trial comparing first-line treatments in people of color, which tried to enroll a 2:1 women/men ratio.

Methods: Twenty (35%) healthcare providers (4/18 physicians, 8/16 study coordinators) participated. Interviews explored motivators/barriers of WoC to participate in trials, including recommendations. Fisher’s exact tests (2-tailed) compared dichotomous (yes/no) categories, generated by qualitative content analysis (inter-rater-reliability >.80), were used.

Results: showed trends among healthcare providers towards greater inter-view participation in women (50% vs. 17%, p=.07), patient-oriented recruitment among those perceiving to work with passion (75% vs. 0%, p=.06), and WoC-oriented recruitment among those being WoC themselves (80% vs. 14%, p=.07). Patient-oriented concerns in recruitment were expressed by 50% of healthcare providers and WoC-oriented concerns by 41%. Most (91%) healthcare providers perceived that trial participation of WoC was driven by egoistic motives (e.g., financial/personal benefits), whereas 41% attributed altruistic motives (e.g., wanting to help). From providers’ perspectives, barriers of WoC to trial participation were mainly protocol-related (91% study criteria), and patient-related, e.g. distrust (75%), individual (58%), situational (58%), cultural (58%), and knowledge barriers (41%), and non-adherence (16%). Some (25%) viewed lack of focus on WoC as study-site-related barrier. Beyond removing barriers and enhancing motivators of WoC to trial participation, recommendations were working with the community, working with passion, hiring WoC, advertising, and educating physicians.

Conclusion: A large proportion of WoC has altruistic motivations for trial participation, although the major motivator is financial. Prominent barriers are: distrust of criteria and distrust. WoC-oriented recruitment may include choosing providers who work with passion and are WoC themselves, revising study protocols to accommodate WoC, including examination of their attitudes, situations, and motivators/barriers. Presenting author email: h.kremer@Miami.edu

WEPE0446

Over the rainbow and severely under the radar: issues of LGBT/AIDS prevention education for non-accessible inner-city lesbian and bisexual young minority women in Oakland, CA

T.R. Lackey, S. Westbrooks, C. Bradford
Sexual Minority Alliance of Alameda County (SMAAC) Youth Center, Oakland, United States

Issues: Oakland, CA which lies just across the bridge and in the shadows of San Francisco, the world’s LGBTQ mecca, is home to a community that is disproportionately affected by HIV/AIDS. Alameda County currently declares a State of Emergency on their HIV/AIDS Crisis and has obtained some resources specifically to serve young gay African American minorities. Resources, however specifically earmarked to research and serve lesbian and bisexual minority women are virtually non-existent despite the huge number of HIV/AIDS in the women’s community. The young Lesbian and Bisexual inner-city community is subterranean, severely non-accessible and is invisible in targeted efforts within the larger LGBT youth community’s HIV/AIDS prevention movement.

Description: The Sexual Minority Alliance of Alameda County (SMAAC) Youth Center is an outgrowth of the original declaration of Alameda County’s State of Emergency. Since its inception SMAAC is a trailblazer in HIV prevention education for LGBT youth of color ages 14-25 and utilizes a multi-pronged approach to prevention which includes Evidence-Based interventions, community mobilization campaigns, substance abuse prevention education, case management, peer-led support groups, arts education and Life Skills.

Lessons learned: SMAAC continually serves over 1300 LGBTQ youth per year and reports an increase in HIV/AIDS awareness and a decrease in sexual risk behavior overall in their youth population. With resources non-existent for Lesbian and Bisexual minority women, the demand for services and disparity gap continues to increase while the ability to provide equal quality specifically designed for young women becomes harder to sustain.

Next steps: SMAAC is nurturing a grassroots young lesbian and Bisexual minority women’s HIV/AIDS prevention movement that is beginning to advocate for the community. This presentation will elaborate on the challenges and lessons learned. Presenting author email: tfiya@smaac.org

WEPE0447

Anax sex, women and HIV: have we been too scared to ask?

B. Le Neveur
New Zealand AIDS Foundation, Auckland, New Zealand

Issues: The rise of HIV transmission in unprotected anal sex for women is 4 x higher than unprotected vaginal intercourse (UAI) with an HIV+ male partner. For HIV the role of AI is far more diverse and potentially lethal. Anax sex is discussed by the HIV & AIDS sector, but in developing and developed nations. Yet

UAI as a method of contraception, as a means to ‘keep’ virginy, as a result of rape, coercion, as a source of sexual pleasure and as a misguided way to avoid pregnancy has all been reported by women as a reality in their sexual behaviour.

Description: A literature search of research involving AI as a sexual behavour for women and relative HIV risk was undertaken. The results were presented to four focus groups of women involved in HIV.

Lessons learned: The gender inequalities compounded by the taboo subject of anal intercourse have impeded our approach to HIV prevention for women. Women of all ages and reporting AI as a daily practice in the 1970s yet very little reference to the risk of HIV transmission through UAI is communicated to women.

Next steps: Research is urgently needed on the reality of AI in some woman’s lives and how much the taboo has impacted on our effectiveness in preventing HIV transmission for girls and women. Particular concern must be focused on women in high risk groups, such as sex workers, partners of MSM and young women, and the role of AI in their HIV transmission risk. Presenting author email: raechael.1@nznzf.org.nz

WEPE0448

Improving access to basic education for Swaziland’s women: building resilience to HIV and strengthening gender empowerment programmes

J. Tydesley*, K. Ahmed, R. Burgess
1Government of Swaziland, Ministry of Health and Social Welfare, Mbabane, Swaziland; 2HEARD, Durban, South Africa, 3London School of Economics, Institute of Social Psychology, London, United Kingdom

Background: Swaziland has the world’s highest rate of HIV sero-prevalence of 42%. Females and young girls are disproportionately affected by the HIV and AIDS epidemics, with 26% of pregnant 15-19 year olds infected. Chronic poverty, food insecurity and sexual violence also continue to plague Swaziland’s women. Basic education is critical in strengthening resilience to HIV vulnerability, especially for females. It also empowers youth by developing their human and social capital. However, education patterns are discouraging.

This study explores the barriers faced by the young women of Swaziland in completing basic education.

Methods: A seminal quantitative study was conducted in 16 schools across the country, in both urban and rural areas; 1st, 2nd and 3rd year girls by age 16-18 were interviewed. Findings were complemented by semi-structured interviews with headmasters and focus group discussions with parent-teacher associations.

Results: Illness and inability to pay for school fees were the principal reasons for absenteeism and grade repetition, with females citing illness at least 13% more frequently than males. 24% and 32% of primary and secondary students respectively reported having a boyfriend or friend or family member who had dropped out of school due to pregnancy. In these instances, secondary school students reported that the girl only returned to education in around a third of cases, almost always to a different school. SEC.

Conclusions: Findings suggest that improving the financial security of young mothers, specifically through enforcement of paternity laws, will be central to retaining young women in basic education. Common assumptions of the reasons behind educational exclusion should be reconsidered, and the role of health interventions - particularly for young girls - is essential. Eliminating the barriers to education for young girls in Swaziland will also strengthen current HIV prevention programmes.

Presenting author email: rochelleburgess@gmail.com

WEPE0449

Safeguarding women: case studies of Jamaican women living with HIV/AIDS

L. Davis
National AIDS Committee, Spanish Town, Jamaica

Issues: Previous studies have shown that, traditionally, in Jamaica, women have relied on men to initiate sex and provide protection from STDs. While less than 1% of males routinely rely on their female partners to provide condom, 25% of females do, and an astounding 58% of women never carry condom (GOJ, 2008). With a large number of social taboos and myths concerning sexual practices and HIV/AIDS and other STDs, many women continue to engage in unsafe sexual practices rather than negotiate condom use.

Description: In depth interviews were conducted with Women Living with HIV AIDS by the Manchester Parish AIDS Association in August 2006 in order to:

(a) ascertain the reactions of the women, and determine factors and guide-lines to effect positive reactions and outlooks; and

(b) Determine policies which would effectively encourage women to share in responsibility for the couples’ sexual harmony.

Lessons learned: The case studies showed that the reactions of the women were often influenced by the perception of individual choice or power, prior to contracting HIV. Women who had been raped, raped or otherwise victimized by their partners/spouses, or were infected by unfaithful spouses, often had negative outcomes. Some struggled with anger, even feeling the need to inflict vengeance and infect other parties. Fear of anger and recrimination prevented the women from communicating their current partners’ and spouses’, friends and family members. Thus, the possibility remained of infection of others by infected partners.

Next steps: Health agencies and community-based organizations should continue to focus on prolonged counseling for PLHIV, to help persons develop appropriate coping mechanisms and appropriate potential strategies to lead fulfilling lives. Strategies of educating women on the need for women to take charge of their bodies, and observe safer reproductive health practices should prove effective in stemming the tide.

Presenting author email: nationalaidscjm@gmail.com
WEPE0450
Sero-prevalence of syphilis in asymptomatic young, unmarried adults, seeking employment in the police service in Sri Lanka

S. Herath, M.W.O.G.D. Dewaranayana, P.K.N.S. Seneviratne


Background: Syphilis is a STI that can be successfully controlled by public health measures; a simple, highly sensitive diagnostic test is available, as is a highly effective antibiotic for which resistance is not developed. Syphilis has been an uncommon problem in Sri Lanka. However, except among promiscuous men, the sero-prevalence of syphilis among general population is unknown in Sri Lanka. The objective is to evaluate the sero-prevalence of syphilis in asymptomatic young unmarried adults, seeking employment in the police service in Sri Lanka.

Methodology: A Veneral Disease Research Laboratory (VDRL) test was carried out on young unmarried adults going for physical examination as part of the pre-employment screening program for employment in police service in Sri Lanka during the period of beginning of January to end of August 2009.

Results: A total of 10851 young adults underwent a VDRL test. Almost 94% of them were males. Majority was 6947 (64.02%) within the age group of 18-22 years while none were above 33 years. Forty five (0.4%) individuals were found to be positive for VDRL. On further investigation with the confirmatory test for syphilis only four (0.03%) individuals were diagnosed as syphillis. Prevalence is thereby 0.036 % (95% CI; 0.020-0.395).

Conclusion: The sero-prevalence for syphilis with VDRL is low among this population. It is recommended that the screening for syphilis in young asymptomatic unmarried adults can be followed by a comprehensive educational programme of informing the possibility of acquisition of infection. This will promote safe sexual behaviours and improve screening for syphilis and other STI especially HIV among these young adults in the future. Moreover, it would reduce the cost, and time spent on performing the test in every individual particularly within this unmarred young population in Sri Lanka.

Presenting author email: shathya_herath@yahoo.com

WEPE0451
Zambian men take positive action to prevent HIV transmission and to care for their spouses and families

M. Sinkala, J. Phiri, C. Mweemba, M. Mbecchi, C. Nguni

1Catholic Medical Mission Board, Health Programs, Lusaka, Zambia, 2Catholic Medical Mission Board, Board of Directors, Lusaka, Zambia, 3Catholic Medical Mission Board, Health Programs, Lusaka, Zambia

Issues: In male dominated societies as in Zambia, men influence attitudes and behaviors related to HIV; drive and perpetuate stigma. We describe an approach introduced as Men Taking Action (MTA) to reframe cultural beliefs and encourage behaviors to prevent HIV transmission and access to HIV care.

Description: MTA program involves evaluating cultural- social factors that influence men to meaningfully and substantively participate in HIV prevention and treatment programs. Based on these findings, we train traditional community leaders to deliver a range of SBCC strategies to encourage men to know their HIV status; behavioral change to protect themselves from acquiring HIV and other STIs; protective sex behavior; and avoidance of blood borne viruses; and learn the art of staying healthy. Program evaluation involves collection and analysis of data on VCT among men and qualitatively by assessing randomly selected men of staying healthy. Program evaluation involves collection and analysis of data on VCT among men and qualitatively by assessing randomly selected men of staying healthy. Program evaluation involves collection and analysis of data on VCT among men and qualitatively by assessing randomly selected men.

Lessons learned: Although most men in rural areas have heard about HIV and AIDS, many do not have a clear idea of the meaning with regards to prevention, transmission, and treatment; many myths exist among men. MTA model has demonstrated that involving men in HIV prevention and care programs improves prevention of HIV transmission, increases uptake of treatment and reduces stigma. Further, involvement of traditional leaders as champions of VCT to address many of the myths and impediments preventing positive male actions can yield positive results compared to conventional methods of relying on professional health workers.

Next steps: At end of 2007 when the project reached three and half years of implementation we shall conduct a more rigorous evaluation focused on actual practices to prevent HIV acquisition and transmission in all the communities implementing MTA. We are also in the process of integrating promotion of male circumcision (MC) to increase demand at household/family level.

Presenting author email: mosesinlkalela81@msn.com

WEPE0452
Addressing the clients of sex workers in combating HIV/AIDS

B. Day1, M.K. Dutta1, S. Ghosh1, S. Jana2

1Durbar Mahila Samanwaya Committee, HIV Program, Kolkata, India, 2Sonagachi Research & Training Institute, Research, Kolkata, India, 3Durbar Mahila Samanwaya Committee, Monitoring & Evaluation, Kolkata, India

Issues: How to reach out to clients of sex workers who are visiting red light areas and to motivate them to engage into safer sex practices.

Description: Durbar Mahila Samanwaya Committee (DMSC), a collective of 65000 sex workers, India, took an initiative around 2008 to address clients of sex workers through establishing “Customer care center” (CCC). It is a sort of “kiosk” which is placed at the entry point of Sonagachi brothel where around nine thousand sex workers live and sell sex services. The CCC is managed by a team consisting of peer educators and counselor. Through CCC direct communication is established with the clients to ensure use of condoms. The CCC operates in between 8.00 p.m. to 12 midnight, during the peak hours of the night. Clients attending CCC are provided with free Condoms. They receive advice related to Sexually Transmitted Infection (STI) counseling and care related services, and are provided with referral slip to access free medical treatment, and Blood testing facilities for HIV the next day or after.

Lessons learned: Roughly 400 clients/month attends STI clinics run by the DMSC, around 300 clients/month availed counseling and blood testing facilities through presenting referral slip to these centres. Condom use rate among the clients has gone up appreciably and around 50% of all clients visiting brothel carry condoms of their own. The HIV prevalence rate among the sex workers and clients remained stable (for clients it is around 2.4% and sex workers around 5%) as verified by the National Sentinel Surveillance conducted in subsequent years.

Next steps: This could be considered an effective mechanism to address clients of sex workers to help improve the outcome of HIV intervention program.

Presenting author email: shyamal_72@hotmail.com
Specific issues for prevention, care and treatment among adolescents and youth

WEPE0455 - WEPE0475

Pregnancy in HIV vertically-infected adolescents: a new generation of HIV-exposed infants

M.L. Cruz1, C. Cardoso1, E. João2, I. Gomes3, C. Nwachukwu1,2, C. Odimegwu3

Background: As vertically infected individuals reach childbearing age a new generation of HIV exposed infants demands attention. Methods: Chart review of pregnancies in vertically infected girls for data before and during pregnancy, delivery and infant outcomes. Results: Fifteen pregnancies in eleven HIV vertically infected adolescents from the population of HIV diagnosis was 10.1 years (IQR: 6.4 - 12.8). Six grandmothers are still alive, one had received ARV during gestation. Girls started sexual life at median age of 15 years (IQR: 14 - 15); median age at the time of first pregnancy was 16.9 years (IQR: 15.7 - 18.0). At pregnancy diagnosis 8/15 (53.3%) were CDC C; have been followed for median 8.4 years (IQR: 6.2 - 10.6) and had used median 2 ARV regimens (IQR: 1 - 4). Fourteen (93.3%) received ARV during pregnancy; median CD4 during pregnancy was 394 (IQR: 213 - 494) cells/mm3 and median viral load was 4,800 copies/ml (IQR: 502 - 16,000). 54% (6/11) had undetectable viral load near delivery. Three girls had HIV infection, 2 had bacterial vaginosis and 1 vaginal candidiasis. All patients delivered by elective c-section. One newborn had severe perinatal anoxia. Median birth weight was 2,650 g (IQR: 2,430 - 3,250), median length was 47.3 cm (IQR: 46.3 - 49) and median gestational age, 38 weeks (IQR: 37 - 39). All newborn received ZVD for 6 weeks of life and MTCT. Twelve (80%) infants were considered HIV-uninfected, and three are still under investigation. Conclusions: This group of adolescents under ARV for years has satisfactory reproductive health, and sexual behavior similar to that of HIV-untreated adolescents. Since this is an experimented ARV population, new drugs may be necessary to reduce mother-to-child transmission (MTCT). Follow-up of this third generation of HIV-exposed infants needs to be addressed within HIV adolescent care. Presenting author email: mleticia@diphse.com.br

WEPE0456 - Regional patterns and correlates of HIV voluntary counseling and testing (VCT) among youths in Nigeria

C. Nwachukwu1, C. Odimegwu2

University of Ibadan, School of Public Health, Ibadan, Nigeria, South Africa, 1Population Council, HIV/AIDS Program, Abuja, Nigeria, 2University of Ibadan, Programme in Demography and Population Studies, Johannesburg, South Africa

Background: Voluntary counseling and testing (VCT) for HIV has been recognized as an effective strategy and entry point to HIV control programs. The impact of this through this program, male-friendly VCT services have reached more men and challenged them with new ideas about men’s role in the prevention of HIV. Mobile services must expand to meet the growing need for male-friendly, targeted VCT services. Presenting author email: teketele@engenderhealth.org

WEPE0457 - Social and behavioural risk factors for HIV infection among street children in Odessa, Ukraine

T. White1, E. Kostro2

1Eton John AIDS Foundation, London, United Kingdom, 2Odesa Charity Fund the Way Home, Odesa, Ukraine

Issues: The population of street children (SC) in Odessa is constantly changing they live in groups of between 3 and 10 with an average age of 15 years old, comprising 76% boys and 24% girls. We have identified their risk factors for contracting HIV. Description: We work directly with SC with the funding support from the Eton John AIDS Foundation. We provide care, support, prevention, harm reduction, feeding and other services. We did a comprehensive analysis of all data on SC in Odessa; this includes a recent CDC serosurveillance study, and from grey research and our own project findings of the last 5 years. We found risk factors for going to the streets include orphan hood, domestic violence, neglect, drug use or alcoholism of parents, sexual abuse and human trafficking. Lessons learned: Of 305 tested in 2009 26.7% (n=83) with HIV+ according to rapid test. Risk factors for HIV infection, intravenous drug use was 77.4%, needle sharing 64%, unsafe sex 84%, selling sex - 62%, having a sexually transmitted disease - 58% and rape - 46%. The Social risk factors include, 43.9% are orphans, 34.8% have a non-parent, more than 3 years in the streets (41.2% of those HIV+), less than 25 % have an adult parent helping them peer pressure and low or no education. Next steps: Street children and HIV street children are socially behaviours disadvantaged. Our efforts to work with them include treating their groups as mini-family and educate, feed, provide medical care, access to an adult as a friend (not acting as a posing professional) and food - especially in winter. Understanding their backgrounds give us access and methods to intervene for HIV prevention, care and support more effectively. Presenting author email: office@wayhome.ua

WEPE0458 - Young people most at risk for HIV/AIDS

E. Fufred1, D. Kellet, B. Dick2

1Family Health International, Research Triangle Park, United States, 2United States Agency for International Development, Washington, D.C., United States, 3World Health Organization, Geneva, Switzerland

Issues: Despite growing attention programming for populations considered “most at risk” for HIV – those who sell sex, those who inject drugs, and men who have sex with men – little focus has emerged on the specific needs of young people (ages 10-24) in these populations. Similarly, youth HIV prevention efforts typically target the general population, paying little attention to most-at-risk youth. Description: In collaboration with the Interagency Youth Working Group led by Family Health International and the United Nations Interagency Task Team on HIV and Young People, the U.S. Agency for International Development sponsored a 2009 meeting entitled Young People Most at Risk for HIV/AIDS. The meeting and resulting knowledge synthesis culminated in the development and dissemination of a paper, with the goal of establishing recommendations and promoting international action to ensure the needs of young people most at risk for HIV are addressed worldwide. Lessons learned: Young people most at risk for HIV lack access to youth-friendly sexual and reproductive health and harm reduction services. Programs should address structural and environmental factors such as poverty, policy, human rights, and educational opportunities. Health systems need to expand youth-targeted services and work to reduce stigma and discrimination toward young clients most at risk for HIV. Next steps: - Utilize country-level data on young people most at risk for HIV to inform advocacy and programming efforts. - Evaluate interventions for most-at-risk young people to obtain evidence on effective programs. - Promote policies and target funding to protect and serve vulnerable and most-at-risk young people. - Engage most-at-risk young people in designing and implementing programs. - Collaborate with health, education, religious and other organizations within communities. - Promote comprehensive, creative programming using peer education, social networks, harm reduction and psychosocial services. Presenting author email: efufred@fhi3.org
WEPE0459
Are we failing to protect our most vulnerable? Elevated rates of injecting heroin daily and structural dislocation among female youth who exchange sex for survival in a Canadian setting
C.L. Miller1, S.J. Fielden1, M. Tyndall2, R. Zhang3, J.S. Montaner4, K. Shankardass2
1Simon Fraser University, Burnaby, Canada, 2University of Montreal, Sexologie, Montreal, Canada, 3BC Centre for Excellence in HIV/AIDS, Vancouver, Canada

Introduction: Due to growing concerns of heightened vulnerabilities and HIV risk among street-involved youth who exchange sex for survival, we compared individual drug use patterns and structural barriers among youth and adult female sex workers (FSWs) in Vancouver, Canada.

Methods: Street-based FSWs were enrolled into the Maka Project, a prospective cohort, and participated in interview-based questionnaires and voluntary HIV screening. Eligibility criteria included being a woman (+14 years) who used illicit drugs and engaged in street-level sex work. We used contingency table analysis comparing baseline socio-demographic, sexual, and drug-related variables between youth (≤24 years) and older (>25 years) FSWs. For longitudinal data, we used generalized estimating equations (GEE) to determine factors associated with being a youth in the prior 6 months throughout the follow-up period.

Results: At baseline, 14% and 24% of participating youth and adults respectively were HIV-positive. In comparison with older FSWs (N=199), younger FSWs (N=56) were more likely to: have fewer years exchanging sex (Median 6.4 [IQR 3.4-11] vs. 19.9 [IQR 10.2-26.8]; p<0.001); be of Aboriginal ancestry (59% vs. 44%; p=0.052); and be homeless (68% vs. 36%; p<0.001). There was no statistically significant difference in the injecting drugs (70% vs. 80%; p=0.104). Young FSWs were less likely to be HIV-positive (43% vs. 70%; p=0.001). In the multivariate GEE, factors that remained associated with younger age were: homelessness (OR:1.26 [CI: 1.08-1.48]); servicing clients in a public place (OR:1.28 [CI: 1.04-1.57]). Females who injected drugs (70% vs. 80%; p=0.104). Young FSWs were less likely to be HIV-positive (43% vs. 70%; p<0.001). In the multivariate GEE, factors that remained associated with younger age were: homelessness (OR:1.26 [CI: 1.08-1.48]); servicing clients in a public place (OR:1.28 [CI: 1.04-1.57]); injecting heroin frequency (OR:1.35 [CI: 1.06-1.74]). Methadone maintenance therapy was inversely associated with younger age (OR:0.76 [CI: 0.62-0.91]).

Conclusion: When compared to adult FSWs, young FSWs have a different risk profile, highlighting continued structural barriers for this population. Our findings emphasize the critical need for targeted structural interventions for street youth, including access to harm reduction and addiction treatment, risk profile, highlighting continued structural barriers for this population. Our findings emphasize the critical need for targeted structural interventions for street youth, including access to harm reduction and addiction treatment, effective housing models and safer work spaces.

Presenting author email: cari_miller@sfu.ca

WEPE0460
Adolescents living with HIV in Zambia: current gaps in prevention, care, SRH and psychosocial support
F. Cataldo1, C. Hauamjopula2, Z. Nguyen3, J. Kampamba2

Issues: In Zambia, access to ART and higher survival rates have considerably increased the number of children living with HIV growing into adolescence and adulthood. Paediatric and adult HIV services, however, have not evolved correspondingly and are currently ill-equipped and inept to respond to the complex needs of adolescents living with HIV.

Description: We report from a cross-sectional observational study conducted in partnership with ART centres and local CBOs in three provinces of Zambia (rural and urban settings). We investigated the current gaps between the needs of adolescents (10 to 19) living with HIV and their access to sexual and reproductive health (SRH) and HIV-related treatment and care services. The study draws on in-depth qualitative and quantitative methods (interviews, focus groups, narratives, surveys and observations) with adolescents living with HIV (~80 girls and ~100 boys) and with health providers and parents/guardians.

Lessons learned: The study shows that HIV represents a complex challenge for adolescents, making the transition to adult treatment and care particularly difficult, and impacting on the development of their sexuality and reproductive health. These challenges include the disclosure of their serostatus to their peers, negotiating safer sexual relationships, the desire to have children, social integration, treatment adherence, emotional wellbeing and mental health. We show that important gaps exist between these basic needs and the services currently available in Zambia. Difficulties in accessing adequate SRH and HIV services result in inadequate information, prevention and treatment being provided, as well as the marginalization of some adolescents living with HIV. Not OR: 4.6 [95% CI: 1.0-26.8]; p<0.001); be of Aboriginal ancestry (59% vs. 44%; p=0.052); and be homeless (68% vs. 36%; p<0.001). There was no statistically significant difference in the injecting drugs (70% vs. 80%; p=0.104). Young FSWs were less likely to be HIV-positive (43% vs. 70%; p=0.001). In the multivariate GEE, factors that remained associated with younger age were: homelessness (OR:1.26 [CI: 1.08-1.48]); servicing clients in a public place (OR:1.28 [CI: 1.04-1.57]); injecting heroin frequency (OR:1.35 [CI: 1.06-1.74]). Methadone maintenance therapy was inversely associated with younger age (OR:0.76 [CI: 0.62-0.91]).

Conclusion: When compared to adult FSWs, young FSWs have a different risk profile, highlighting continued structural barriers for this population. Our findings emphasize the critical need for targeted structural interventions for street youth, including access to harm reduction and addiction treatment, supportive housing models and safer work spaces.

Presenting author email: cari_miller@sfu.ca

WEPE0461
Transitioning HIV-infected adolescents into adult care
K. Cavolo1, J. Marte1, J. Birnbaum1, J. Abadi2, M. Rosenberg3, B. Warren4, T. Hatton5, B. Agras6, J. Leider4
1Johns Hopkins University School of Medicine, Division of Infectious Diseases, Baltimore, United States, 2New York State Department of Health, AIDS Institute, New York, United States, 3SUNY Downstate Medical Center, Heat Program, Brooklyn, United States, 4Albert Einstein College of Medicine, Pediatrics, Bronx, United States, 5New York State Department of Health, AIDS Institute, Albany, United States, 6North Bronx Healthcare Network, Bronx, United States

Issues: As HIV-infected adolescents age into adulthood, it becomes necessary to transfer them to the adult care environment, in which the model of care is intrinsically different from that practiced in the pediatric or adolescent setting. Common challenges to successful transitioning include adjustment to and assuming responsibility for one’s own health. Transitioning to an adult care setting without preparation may result in young adults dropping out of care. Guidelines need to address specific needs of those youth with perinatally-acquired infection as distinct from those who are behaviorally infected.

Description: The New York State Department of Health AIDS Institute (NYS-DHAI) has developed guidelines to assist providers with the transition process and provide direction for HIV-infected young adults to be successfully and seamlessly integrated into an adult care setting. The cornerstones for effective transition planning include having a plan in place prior to the time of transition, actively involving the patient in the process, involving representatives of both the adolescent and adult clinics and establishing communication between them prior to and during transition, and addressing the psychosocial aspects of transitioning.

Lessons learned: The likelihood for successful transition is increased when both the pediatric/adolescent and adult healthcare teams recognize that readiness for transition to adult care will vary for individual patients, ranging from those who are near full autonomy to those who will require significant assistance to adhere to appointments and medications. The pediatric/adolescent provider should offer training in the skills that are required to negotiate the differences in expectations and clinic cultures in the adult health care delivery system. Use of a transition coordinator or a patient advocate can help ensure that the transition will succeed.

Next steps: The NYS-DHAI is compiling examples of successful models of care that are being used in transitioning to share with adult and pediatric/adolescent providers.

Presenting author email: jason.leider@nhn.net

WEPE0462
Current status of adolescent sexual and reproductive health (ASRH) education/services in China
Y. Zhang1
1Renmin University of China, The School of Sociology and Population Studies, Beijing, China, 2China Youth Network, Core member group, Beijing, China

Issues: China’s rapid economic growth and massive urbanization is exposing young people to considerable sexual and reproductive health risks. Young people face problems like increasing prevalence of HIV infection, longer exposure to unsafe sex, and abortions etc. In response, programs focusing on sexual and reproductive health (ASRH) programs are promoted in China in past decade. But according to surveys, those programs are not extensively carried out.

Description: ASRH programs in China are delivered through two systems: 1. Education intervention/school courses, peer education, media intervention, community intervention.; 2. Services intervention: youth-friendly services (YFS), clinic intervention, hotline.

But studies show that ASRH programs are not popular among youth, and the utility of YFS remains low. There are still 57.2% of young people who do not know how to use a condom correctly and 22.9% do not know where to get a HIV test. Another survey suggested 80.4% of university students gained SRH information from newspapers and magazines.

Lessons learned: 1. Culture factors: China is a relatively conservative country. It is universally believed youth will naturally know what they should know when they grow up, therefore, formal education is not widely used. 2. Attitudes factors: Youth gain SRH information easily from internet and magazines etc. And they believe they have known all the knowledge so education seems to be unnecessary. 3. Publicity factors: Publicity and advertisement of peer education or YFS is insufficient. Only few universities and communities offer ASRH education. 4. Policy factors: There is no legal requirement to provide sexual and reproductive health services to unmarried young people. And courses in school mainly teach about physiological knowledge, but not true sexual education.

Next steps: Firstly, advocate government to make laws and policies aiming to promoting ASRH programs in a regular and systematic way. Second, IEC/BCC materials to convince people of the importance of ASRH. Thirdly, promote the publicity of ASRH programs with the support of both NGOs and GOs.

Presenting author email: zyx13821059@163.com
WEPE0463
HIV/AIDS knowledge, attitudes and practices by youth in Belgium - the key role of parents and early sex education
M. Fontes1, P. Roach2
1Durex Network, Brasilia, Brazil, 2Durex Network, London, United Kingdom

Objectives: Significant drops in HIV/AIDS rates are being reported in several European countries. However, there are still groups, especially among youth, that are vulnerable to lack of sex education and are not using protective methods. This study assessed the relationship between HIV/AIDS knowledge, attitudes and practices by young Belgians aged 15 to 25.

Methods: Findings from this study are based on responses to a Youth Trends web-based survey which was carried out between December 2009 and January 2010 among youngsters in Belgium. Margin of error was set at 3% (n=1,000). Out of the 2,234 responses in total, 1,412 were sexually active.

Result: Use of condoms at last sex was 51.1% (CI95% 48.4;53.75) for non-virgins. Gender, age, number of sexual partners, age at first sexual intercourse, living with parents, and parents and public education as the main sources of sex education are predictors of higher HIV/AIDS knowledge (p-value<0.05). Relationship status, living alone/with partner, and all other sources of sex and relationship education were not associated to the outcome variable. Parents as main source of sex education improve the mean level of KAP by 4.8 points (CI95% 7.0; 9.1). Young males score significantly lower if compared to females or (p<0.05).

Conclusions: Findings identified areas which have a direct bearing on HIV/AIDS knowledge, attitudes and practices need for parents to engage in sex education of their children; b) the importance of creating targeted opportunities for young males to participate in HIV/AIDS programs; and c) the need for early sex education.

Presenting author email: m.fontes@johnsnow.com.br

WEPE0464
Perinatal HIV and emerging adulthood: context transitioning adolescents to young adult medical care in Harlem
I. Schlecht1, E. Kang, K. Brown, L.G. Robinson
1Columbia University/ Harlem Hospital, Pediatrics, New York, New York, United States

Issues: Adolescents with perinatal HIV infection in the United States (US) live longer and healthier lives with the advancement of HAART. However, many confront poverty, low levels of education and an inability to maintain responsible for personal well-being, and difficulty internalizing and processing abstract concepts. Furthermore, there is a lack of accurate, holistic and youth-friendly informational materials. These factors have hindered the ability to change attitudes and behaviors available to HIV-positive adolescents on how to live a healthy lifestyle.

Description: The Teen Talk guide was translated into Setswana in the United States in 2004 by Weiner and Wood. Adaptation involved par- fers and 3 adolescents. The US version contained 4 sections (CI95% 95% 5.8; 9.9). A great emphasis was placed on sections pertaining to HIV (3), ARVs (6), adherence (4), disclosure (6), prevention (6) and exercise (5). The guide has been translated into Setswana and a list of local sources for further information was included. *Number of sections in section.

Lessons learned: Adolescents living with HIV require information about healthy decision-making and how it relates to their infection in order to live positively and avoid treatment failure. Feedback from adolescents involved in the adaptation phase of Teen Talk material development has been overwhelmingly positive regarding its potential as an information resource.

Next steps: Next steps include pre-testing the Teen Talk guide in 6 ARV sites throughout Botswana and incorporating feedback for national rollout.

WEPE0465
Strategic information on young people most-at-risk of HIV in Asia: evidence to guide prevention efforts
O. Burrow1, M.H. Sheikh Mahmud1, K. Chitti2, M. Sheehan3, J. Sauvain1
1UNICEF APDISSC, Singapore, 2Sydney, Australia, 3Independent Consultant, Kuala Lumpur, Malaysia, UNICEF APDISSC, Bangkok, Thailand, UNAIDS, Bangkok, Thailand

Purpose: HIV testing among 10-24 year olds sex worker(SW), IDUs and MSM in Asia.

Description: Secondary analysis was conducted of available sero-surveillance and behavioural reports from 2005 to 2009 of 17 countries across South and East Asia. Qualitative and quantitative research studies on MARPs gathered through networks within the UN agencies, civil society and scientific journals were also reviewed. HIV prevalence and national response. A review commissioning by UNICEF and UNAIDS sought to expand the strategic informa-

Next steps: The analysis points to greater attention in the region on HIV pre-

WEPE0466
Teen Talk (Botswana Edition): a question and answer guide for HIV-positive adolescents
J. Rosebush1, S. Petrin2, A. Offorjebe1, N. Bhotin3, H. Jinbi4, G. Anabwani2
1Botswana-Baylor Children’s Clinical Care Project, Gaborone, Botswana, 2Ministry of Health - Botswana, Gaborone, Botswana, 3Botswana, Ministry of Health - Botswana, Gaborone, Botswana

Issues: More than 3,000 adolescents will be receiving antiretroviral (ARV) medications in Botswana by the 2011. Adolescents are associated with emotional turbulence, an inability to maintain responsibility for personal well-being, and difficulty internalizing and processing abstract concepts. Furthermore, there is a lack of accurate, holistic and youth-friendly informational materials. These factors have hindered the ability of HIV-positive adolescents on how to live a healthy lifestyle.

Description: The Botswana edition of Teen Talk, a question and answer guide for HIV-positive adolescents, was adapted from the original version published in the United States in 2004 by Weiner and Wood. Adaptation involved participation from 2 local doctors, 1 psychologist, 1 social worker, 2 lay volunteers and 10 adolescent peer educators. The US version contained 4 sections with 37 questions compared to the Botswana version with 7 sections and 84 questions. Sections on sex (18), emotions (13), friendship (5), and future planning (2) were edited for cultural content. Two new regional issues priorities in Botswana, sections on Safe Male Circumcision (4), Prevention (7), Multiple Concurrent Partnerships (2), and Prevention of Mother-to-Child Transmission (1) also were added. A great emphasis was placed on sections pertaining to HIV (3), ARVs (6), adherence (4), disclosure (6), prevention (6) and exercise (5). The guide has been translated into Setswana and a list of local sources for further information was included. *Number of sections in section.

Lessons learned: Adolescents living with HIV require information about healthy decision-making and how it relates to their infection in order to live positively and avoid treatment failure. Feedback from adolescents involved in the adaptation phase of Teen Talk material development has been overwhelmingly positive regarding its potential as an information resource.

Next steps: Next steps include pre-testing the Teen Talk guide in 6 ARV sites throughout Botswana and incorporating feedback for national rollout.

WEPE0467
Vulnerability to STI/HIV among male street children under 18 years of age, New Delhi, India
N. Davda, P. Chan, D. Reddy
WHO CD, New Delhi, India

Background: Little is known about the HIV vulnerability of at-risk minors under the age of legal consent. Sporadic reports from non-governmental orga-

Lessons learned: Forty-seven percent of the male street children accessing NGO services were interviewed using focus group discussions and pre-tested questionnaires from February to May 2009. STI/HIV related risk behaviour, knowledge, attitude and health service uptake was examined.

Results: Of the 74 interviewed 59(80%) had ‘ever had sex’ and 45(76%) of them had sexual debut between 10 to 14 years of age with 44(75%) with males. During the month preceding the interview 55 (93%) had sex with male partners. 17(31%) of whom reporting having 3-4 male partners during the month and 34(62%) had both receptive and penetrative sex. Older age group (15-18 years old) compared to younger (10-14 years old) had more heterosexual activity (69% vs. 35%). 65% of the younger children had male partners only. In the last one month or sexual activity, less than a third reported using condoms. 93% of all children had heard of HIV/AIDS, of them 47% cited consistent and correct condom use as HIV prevention method. Only 16% perceived themselves at high risk of contracting HIV. Use of ARVs drugs was reported 62 (85%). Access to health services was limited mainly due to issues of legal consent for minors, stigma and the lack of youth-friendly health services. NGO staff reported difficulties in linking children to health services due to these barriers.

Conclusions: A large number of male street children reported male-to-male sex with some older children being bisexual. Risk perception was low. Stigma and discrimination and inability to provide consent to HIV services are major barriers to accessing health services. The issues of legal consent for minors need to be urgently addressed.

Presenting author email: natasha_dawa@rediffmail.com
WEPE0468 Missing the epidemic: most-at-risk adolescents
H. Homan
University of Aberdeen, Centre for Sustainable International Development, Aberdeen, United Kingdom

Issues: Evidence is emerging of HIV risk behaviour amongst adolescents within countries of the Former Soviet Union. Structural factors (often inter-linked) play a key role: absence or weak parental care, conflict and displace- ment, gender-based violence, migration, poverty and youth unemployment. Access to HIV prevention and care is often limited for young people due to the manner in which services are provided and the surrounding policy envi- ronment.

Description: A review of data shows that: about 20% of females involved in sex work regionally are adolescents; youth and adult migration (mainly male) to countries with higher HIV prevalence has contributed to increased HIV transmission; war and civil unrest have left many young people internally displaced and for some displaced disaffected young men injecting drug has become a feature of their lives; social exclusion adversely affects the Roma - in some countries young Roma girls are disproportionately represented amongst street-based sex workers and young Roma transgendered people are on the streets selling sex; (often to support injecting drug use). High levels of gen- der-based violence and police harassment of most-at-risk adolescents have been recorded and children living without parental care are especially vulner- able to engage in HIV risk behaviour.

A global review of GFATM funding proposals found that the HIV prevention and treatment needs of most-at-risk adolescents continues to be overlooked.

Lessons learned: It is unrealistic to expect that health services on their own can change the pathways of most-at-risk adolescents. However, service providers have a role to play in advocating for social inclusion and for attention to be paid to those in greatest need.

Next steps: A supportive policy framework and protection mechanisms need to be urgently developed and changes made in the way that information, commodities and services are delivered. Ten recommendations are made to address structural and services delivery problems.

Presenting author email: homanh@hotmail.com

WEPE0469 Youth co-researchers explore street-involved youth perspectives on preventing the transition into injection drug use
N. Van Borek1, L. Cozer2,3, YIP Co-Researchers, M. Botnick1, C. Chambers1, D. Taylor2, L. Saewyc1, J.A. Buist1
1British Columbia Centre for Disease Control, Division of Epidemiology Services, Vancouver, Canada, 2Simon Fraser University, Faculty of Health Sciences, Burnaby, British Columbia, Canada, 3University of British Columbia, School of Population & Public Health, Vancouver, Canada, 4British Columbia Centre for Disease Control, Division of STI / HIV Prevention and Control, Vancouver, Canada, 5University of British Columbia, School of Nursing, Vancouver, Canada, 6University of British Columbia, School of Nursing, Vancouver, Canada, 7The McCreary Centre Society, Burnaby, Canada

Background: From 2002 to 2008, 30% of newly diagnosed HIV cases in British Columbia (BC), Canada identified injection drug use as the major risk factor, with 20% of all HIV cases reported in persons aged 15-28 years. The Youth Injection Prevention (YIP) Project is a collaborative study between the BC Centre for Disease Control, UBC School of Population and Public Health, UBC School of Nursing, community partners and youth co-researchers that focuses on identifying factors associated with preventing the transition into in- jecting drug use (IDU) among street-involved youth in Metro Vancouver, BC.

Methods: Ten focus groups and twenty interviews were conducted with street-involved youth aged 15-28 years from November 2008-March 2010. Youth co-researchers participated in script design, co-facilitation of focus groups and data analysis. Study participants were recruited through community leaders and providers. Focus group and interviews were audio-recorded, transcribed verbatim and analyzed using open coding and domain analysis with NVivo 8 qualitative software.

Results: Domain analysis identified four main threads associated with transi- tion into IDU:

(i) risk factors;
(ii) resiliency factors;
(iii) gender influences; and
(iv) service design recommendations.

Preliminary findings suggest:

(i) risk factors include: boredom, drug pricing, homelessness, IDU in social network and/or family;
(ii) resiliency factors include: concern for self-image and health, desire for a better life, fear of needles, sense of responsibility for others, stigma;
(iii) gender differences may include: females may be more likely to transition via association with dealers and/or pimps, to be doctored by males rather than vice versa; males perceived more influenced by peer pressure;
(iv) service design recommendations include: capacity building, low-barrier policies, experiential youth peer outreach, youth-specific services.

Conclusions: Study results will be disseminated via various forms of knowl- edge translation to inform potential intervention strategies to prevent the transition into IDU and/or reduce the harms associated with injecting among street-involved youth.

Presenting author email: natasha.vanborek@bccdc.ca

WEPE0470 Health and prevention in schools project: addressing youth vulnerability in Brazil
Y. Linhares1,2, K. Russao1, Y. Saldana1, M. Malta1
1Osvaldo Cruz Foundation, Social Science Department, Rio de Janeiro, Brazil, 2GYCA - Global Youth Coalition, Rio de Janeiro, Brazil

Issues: Created in 2003, SPE is a partnership between the Brazilian National STD/AIDS Program, UNESCO, UNICEF, and UNFPA. It aims to achieve inte- gration between health and education services in order to promote preven- tive health education and incorporate educational activities in Brazilian public middle and high schools.

Description: The intervention process include condom distribution in select- ed public schools and adopted a holistic approach on sexual and reproductive health, participatory learning methods with emphasis on sexual and reproduc- tive health as a multidisciplinary and crossingcutting theme, incentive of stu- dent’s creativity and participation. Teachers and peers educators are trained to conduct educational activities on issues such as sexuality, HIV/AIDS/STD prevention, gender, contraception leadership, self-esteem, etc. The project involves as many stakeholders as possible to contribute towards this process, such as young people themselves, the school community, universities, NGOs and networks of young people.

Lessons learned: Key SPE outcomes include a strong youth engagement in the development of several initiatives, including peer education, theatre and arts activities, workshops etc. The intervention increased condom use among sexually active adolescents, increased students knowledge and skills towards adoption of safer behaviors; SPE is contributing to create a comfort- able environment in order to address sexuality, sexual diversity and gender issues within schools.

Next steps: SPE is demonstrating a strong effect on youth leadership and participation in the development of different interventions towards HIV/AIDS prevention, human rights and discussion about sexuality and sexual diversity within schools. Condom accessibility will be increased through machines that distribute free condoms in selected public schools as of mid 2010. After this implementation, we will evaluate the acceptability of this strategy and its impact on condom access and use among Brazilian public school students, and strategy that will be conducted together will all preventive interventions already developed by SPE.

Presenting author email: malta@nspf.fiocruz.br

WEPE0471 Research to practice: state-level strategies to assist health departments in addressing the HIV epidemic among young black and Latino men who have sex with men (MSM)
G. Jenkins, F. Ruiz
National Alliance of State & Territorial AIDS Directors, Racial & Ethnic Health Disparities, Washington, United States

Issues: According to the U.S. Centers for Disease Control and Prevention, young black and Latino men who have sex with men (MSM) aged 13 - 29 years represent approximately 69 percent of new HIV infections. These popu- lations are disproportionately burdened by HIV and other STIs and increas- ingly have the greatest risk of negative sexual health outcomes in the U.S.

Description: In response to rising HIV incidence rates among young black and Latino MSM, the National Alliance of State & Territorial AIDS Direc- tors (NASTAD) - a national nonprofit association of state health department HIV/AIDS program directors - launched an issue brief series exploring the challenges faced by health departments in addressing this crisis. These docu- ments were designed to explore the complexity of needs, challenges and so- cial conditions that heighten risk of HIV infection. The issue briefs offer health departments and their community partners a range of guiding principles, ef- fective strategies and best practices for engaging youth.

Lessons learned: Moving from research to practice, NASTAD surveyed mem- bers to assess the relevance of issue briefs to current, state-level prevention programming efforts. Their responses have been categorized into structural and behavioral interventions. Profiles of state programs were developed to aid other state health departments, and offer examples of successfully im- plemented strategies addressing the HIV epidemic among young black and Latino MSM. In addition, the issue brief series discusses how youth develop- ment principles can be integrated into an overall public health strategy that empowers youth to play an active role in determining what health department activities might be most effective in improving sexual health outcomes for young people.

Next steps: NASTAD will provide peer-based technical assistance on effective HIV/AIDS prevention, care and treatment programs targeting young black and Latino MSM. NASTAD will identify and link peer HIV/AIDS programs to help other jurisdictions adapt, implement and evaluate their own programs.

Presenting author email: gjenkins@nastad.org
WEPE0472
Who is more willing to test for HIV? A comparison of community and school-based youths in Port Harcourt, Nigeria

S. Babatunde
University of Port Harcourt, Centre for Health and Development, Port Harcourt, Nigeria

Background: Young people bear a significant HIV/AIDS burden worldwide, yet most do not know their HIV status or voluntarily test for HIV. This study compared attitudes toward HIV testing, and the influence of selected socio-demographic and HIV/AIDS-related factors between community and school-based youths aged 10–24 years in Port Harcourt, Nigeria.

Methods: A comparative cross-sectional study was conducted in March 2006 in Azubie, a peri-urban community, and the College of Arts and Science in Port Harcourt. Multi-staged sampling was conducted, while data was collected using pre-tested, structured questionnaires.

Results: A total of 420 participants were interviewed: 219 in Azubie, and 201 from the College of Arts and Science. The mean ages differed; 18.2±3.9 years for Azubie and 20.1±2.1 years for the College (t-test p-value=0.00). The sex distributions were similar but educational status varied among the community youths - only 9.6% had tertiary education. More participants were aware of VCT in the College compared to Azubie. 13.7% compared to 5.0%. Over three-quarters, 76.2% (95%CI=69.8-81.8) of the community youths indicated willingness to voluntarily test for HIV compared to 56.7% (95%CI=49.1-64.0) among school youths. The commonest reason for willingness to test was the desire to confirm HIV status. Approval of voluntary testing was more likely to influence willingness to test than approval of mandatory testing, and history of previous HIV test.

Conclusions: A high level of willingness to test was observed; particularly among community-based youths who exhibited relatively less knowledge of and access to VCT. A scaling-up of VCT services at community-level would increase opportunities for such young people to translate intent into actual testing for their own self-benefit, which by default has greater exposure to HIV/AIDS interventions, opportunities should be maximized by reaching them with high-impact behaviour change interventions such as HIV Risk Communication and Education.

Presenting author email: sayebas@gmail.com

WEPE0473
"Brother to Brother": an interrogation of HIV prevalence among young black MSM in Boston

Harvard University, Master of Liberal Arts Program, Cambridge, United States

Issues: Childhood development, racism, discrimination, stigma, masculinity, adolescence, sexual relationships, HIV testing, medical establishment experiences, success and failures of current prevention methods, sexual identity, racial identity.

Description: This is a qualitative study looking at the psychosocial, socio-cultural, and historiographical reasons for the HIV prevalence among young Black MSM living in Boston. The greater Boston area offers a different cultural experience than other major metropolitan areas in the United States; this study explores these differences, as influenced by sexual behavior and sexual identity among young Black MSM ages 18-29. Qualitative factors such as racial identity, sexual identity, human development, level of education, socio-economic status, religion, masculinity, self-concept, and self-esteem are all considered as adding value to truly understanding this epidemic.

Participants were interviewed via snowball method and online dating sites. Each participant is taken through a series of questions, written to take no more than an hour. Participants were not compensated, but received a resource list of options for Black MSM in the Boston area.

Lessons learned: Numerous themes have come out of the research thus far. Emerging factors affecting sexual risk taking are lack of identification with the gay culture, dislike for condoms, educational attainment, and lack of access to prevention methods. Participants expressed candidacy in their experiences of racism and discrimination, it’s prevalence in Boston, and how this has affected their self-development.

Next steps: Moving forward, the results of this research will not only inform community-based organizations on the needs of young Black MSM, but also contribute to the body of knowledge surrounding HIV prevention and intervention for Black MSM and other young populations disproportionately affected by the epidemic.

Presenting author email: jamaalclue@gmail.com

WEPE0474
Using school clubs to influence behaviour modification and stigma reduction among Jamaican youths

C. Ledgister
National AIDS Committee, Kingston, Jamaica

Issues: The Jamaican society has been flooded with information on safer sex practices. Despite the large input of resources and efforts geared towards behaviour change, the HIV prevalence rate remains high at 1.8% of the population (among the 15–49 age group), and alarming rates of 1% and 6% among children of the 10–14 and 15–19 age groups respectively. The Trelawny Parish AIDS Council (TPAC) believes that early interventions targeting preadolescents and adolescents to positively influence behaviour formation are critical to arrest the highly reducing infection rates overall.

Description: A 3-year pilot project was conducted in 9 primary schools in the parish of Trelawny, Jamaica, with over 150 children between the ages of 9 and 12 years. The primary objective was comparing the attitudes of students in positive behavior formation programmes who did not participate. The pilot project involved the combination of dance, drama, and song, to create awareness. This gave the students the tools to change the landscape of AIDS in Jamaica.

Presenting author email: nationalaidscomj@gmail.com

WEPE0475
Use of HIV testing among youth in Cape Town, South Africa

S. Enoju, A. Knittel, R. Thornton, D. Lam
University of Michigan, Ann Arbor, MI, United States, University of Michigan, Health Behavior & Health Education, Ann Arbor, United States, University of Michigan, Economics, Ann Arbor, United States, University of Michigan, Population Studies Center, Ann Arbor, United States

Background: In Western Cape South Africa in 2005, 11.2% of 15-24 year olds were HIV-positive. Given that HIV testing is a critical gateway to treatment, this study explores determinants of HIV testing among African and Coloured youth (age 18-26) using the Cape Area Panel Study, a longitudinal study of youth in Cape Town, South Africa.

Methods: Analysis is based on Wave 4 data, collected in 2006. Stratified logistic regression models of self-reported HIV testing were constructed using demographic, economic, health, and sexual experience variables.

Results: 55% of respondents reported testing for HIV, 58% of African, and 53% of Coloured youth, respectively. More women than men had tested (72% of females, 36% of males), even after adjusting for experience of pregnancy (OR = 3.73). The greater odds of females testing, relative to males, is more pronounced among Coloured youth (OR = 6.61), than among Africans (OR = 2.72), and pregnancy experience increases likelihood of HIV testing for Coloured women more dramatically (OR = 10.13) than for African women (OR = 9.92). For African males, increasing age, having fathered a child, condom use, and having helped others in the past year predict use of HIV testing. Correlates for African women include increasing age, pregnancy, and having helped others. For Coloured men, only reported condom use predicts use of HIV testing, and for Coloured women, correlates included pregnancy and receiving transfers from outside the household, while responding "yes" to indices of depression decreased the odds of testing.

Conclusions: Overall rates of testing in this population are high, but the findings are consistent with evidence from elsewhere in South Africa of higher rates of HIV testing among females, even after accounting for female testing during pregnancy. The evidence also suggests that if never pregnant, Coloured women are unlikely to learn their HIV status.

Presenting author email: rcsonow@umich.edu

WEPE0476
Telephonic follow-up of Indian truck-drivers and cleaners (TDC) participating in a government HIV peer educator (PE) prevention program reveals challenges in evaluation and evidence of differential responses based on peer/participant homophily

G.R. Kondamreddy, S.R. Gandham, A. Dube, J. Schneider
3Share India, Hyderabad, India; 4Pratiksha School of Medicine, University of Chicago, Chicago, United States, 1University of Chicago, Department of Medicine and Department of Health Studies, Chicago, United States

Background: Government HIV prevention programs for TDC in India are limited and where available follow a typical protocol of four components: behavior change communication, STD care, condom promotion and promotion of an enabling environment. Such programs are not evaluated for outcomes and longitudinal follow-up remains a significant obstacle to effectiveness and evaluation. We conducted an evaluation of process of Double-Community Truck Driver (DCTD) HIV prevention program would require.

Methods: We analyzed data from six months of records and conducted telephonic follow-up of TDC participating in a publicly funded tuberculosis (TB) - and truck-driver HIV prevention program in Hyderabad. Sociodemographics from participants and, PEs, participant risk variables and factors associated with provision of PEs included. Descriptive statistics and bivariate analyses were conducted.

Results: 3,488 TDC were included in the analyses of which 93.5% were truck-drivers, mean age was 33 (SD 6.2), 46.3% were < primary education, 3,488 TDC were included in the analyses of which 93.5% were truck-drivers, mean age was 33 (SD 6.2), 46.3% were < primary education, 7 secondary/high schools in Trelawny.
WEPE0477

The couple as context: relationship characteristics, sexual agreement and concerns about HIV among Latino gay male couples

S.C. Bovbjerg, C. Hoff
San Francisco State University, Center for Research on Gender and Sexuality, San Francisco, United States

Background: HIV prevention efforts with gay men in relationships frequently only consider primary partners. When they are considered, examinations of race/ethnicity are often overlooked despite higher infection rates among gay men of color.

Methods: Using semi-structured, qualitative interviews with 10 Latino gay couples, we present data from a study on the complexity of race/ethnicity in the context of relationship characteristics, sexual agreements, and concerns about HIV among gay couples and HIV. Interviews queried relationship history, racial/ethnic and sexual identities, sexual agreements and behaviors, and any broader considerations.

Results: Nearly all participants were HIV-negative and in concordant negative relationships. Most had closed agreements that included clauses addressing sex with outside partners ‘just in case’ it occurred. Over half reported broken agreements that a majority were undiagnosed.

Conclusions: While generally low risk, concerns remain about the participants’ attitudes and behaviors around HIV, especially where long-term HIV prevalent populations have described experiences of racism, homophobia, and discrimination as immigrants. Hardship notwithstanding, participants felt positively about being in a relationship with another Latino gay man. Intimate relationships are an important context for understanding concerns around HIV among Latino gay men. Likewise, race/ethnicity provides an indispensable perspective on research and intervention with gay couples. Future prevention efforts and analyses of risk with gay men must include both.

Presenting author email: seancb@sfsu.edu

WEPE0478

Understanding disparities in HIV infection between black and white men who have sex with men in the United States: data from the national HIV behavioral surveillance system

A. Oster1, R. Wiegand2, C. Sison3, J. Miles4, L. Melendez-Morales5, P. Thomas6, B. Lee7, G. Millet8
1Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, Atlanta, United States, 2Northrop Gruman (Contractor), Atlanta, United States

Background: In the United States, black men who have sex with men (MSM) are disproportionately infected with HIV. This disparity is explained by neither number of sex partners nor unprotected anal intercourse (UAI) and is only partially explained by less frequent HIV testing. We evaluated several additional hypotheses for higher prevalence of HIV infection among black MSM.

Methods: For the 2008 National HIV Behavioral Surveillance System, a cross-sectional survey conducted in 21 U.S. cities, MSM (black=2194, white=3448) were interviewed and tested for HIV infection. For MSM previously diagnosed with HIV infection, we assessed use of HIV care and antiretroviral therapy. For all other MSM, we used logistic regression to test associations between newly diagnosed HIV infection and partner status, circumcision, incarceration history, and sexual networks (older partners, currency, and partner risk behaviors), controlling for sociodemographics, in injection drug use, number of UAI partners, and HIV testing history.

Results: Among 636 MSM previously diagnosed with HIV infection, fewer blacks than whites accessed HIV care within three months of diagnosis (prevalence risk: 95% CI; 0.89, 0.97) or were on antiretroviral therapy (PR=0.80, CI=0.71-0.91). Among 5003 MSM not known to be HIV infected, 10% tested positive for HIV infection (whites=4%, blacks=18%). In multivariate analysis, reporting an HIV-positive last partner was associated with HIV infection (adjusted odds ratio=1.8, CI=1.1-2.8 vs. HIV-negative). However, fewer blacks than white MSM reported an HIV-positive last partner (chi-square p<0.001). HIV infection was associated with control variables (sociodemographics, older partner, currency, and sexual network variables).

Conclusions: Delay in accessing HIV care and decreased prevalence of antiretroviral therapy may increase infectiousness among HIV-positive black men who have sex with men. Considering circumcision, incarceration, or sex with older or high risk partners does not appear to be responsible for the disparity in HIV infection.

Presenting author email: gregorio_a_millet@yahoo.com

WEPE0479

Racial healthcare disparity: HIV-related symptoms and side-effects of antiretroviral treatments experienced by American Asian/Pacific Islanders and sub-stance use for symptom management


1University of California, San Francisco, School of Nursing, San Francisco, United States, 2MGH Institute of Health Professions, School of Nursing, Boston, Massachusetts, United States, 3Texas A & M University, Corpus Christi, United States, 4Septon Family of Hospitals, Austin, United States, 5University of Illinois at Chicago College of Medicine, Chicago, United States, 6University of North Carolina at Chapel Hill, Chapel Hill, United States, 7University of South Africa, Pretoria, South Africa, 8Institute for Hispanic Health, Washington, United States, 9Francies Payne Bath School of Nursing Case Western Reserve University, Cleveland, United States

Background: Healthcare disparities and substance use in people living with HIV (FLWHA) has been documented, however, little is known about their impact among HIV-infected American Asian/Pacific Islanders. As we found evidence of AIDS cases, the purpose of this study was to (1) compare (HIV and antiretroviral (ARV)-related) symptoms experienced by AAPI and others and (2) examine substance use as a symptom management strategy among FLWHA in care.

Methods: This study evaluated baseline data from a multi-national RCT with 775 HIV infected individuals: 165 (21.3%) non-Hispanic whites, 337 (43.5%) African Americans (AA), 216 (27.9%) Hispanics, 11 (1.4%) AAPI, 8 (1.0%) Native Americans (NA), and 38 (4.9%) other. Study participants were asked if they experienced common HIV-related or ARV treatment symptoms including anxiety, depression, diarrhea, dyspepsia, nausea, peptic ulcer disease (PU), and weight loss. We compared self-reported symptoms across groups, and examined substance use and its relationship to symptoms.

Results: AAPI reported higher rates of occurrence for all symptoms except nausea than any other group (p<0.05). However, there was a statistically significant difference in occurrence of depression symptom between AAPI and AA (p=0.08). Depression ( wyświetl[453][545]chi-square tests followed by Bonferroni post hoc test). Diarrhea was associated with depression, dyspepsia with depression and anxiety. In past 6 months 14.8% reported an STD symptom. Provision of phone number was associated with drivers, those who had phone number were 2.5 times more likely to represent a higher proportion of the population than FLWHA in care.

Conclusions: The results of this study suggest that AAPI are more likely to suffer from HIV-related symptoms and substance use, and may require interventions to manage unwanted symptoms especially depression and anxiety.

Presenting author email: emory.l бум@emory.edu

WEPE0480

Beyond sexual labels: a qualitative exploration of how social contexts, mental health and race-specific coping strategies factor in the lives and sexual behavior of a geographically and sexually diverse sample of black men in Georgia

D. Malebranche1, L. Bowleg2, T. Sangamorothy3, Y. Wimberly4, B. Park5, M. Romani6, A. McKelvey Stone7

1Emory University, Division of General Medicine, Atlanta, United States, 2Drexel University College of Medicine, School of Public Health, Philadelphia, United States, 3University of Minnesota, Centers for Disease Control and Prevention, Atlanta, United States, 4Intervention/Research Branch, Atlanta, United States, 5Morehouse School of Medicine, Department of Pediatrics, Atlanta, United States

Background: Black men in the Southeastern United States suffer from the highest rates of HIV in the country, regardless of sexual identity category or geographical location. Little research, however, has explored meaningful intra-racial comparisons of geographical contexts that include how mental health determinants and race-specific coping strategies factor into HIV risk and protective behaviors. This study examines the impact of race, sexual orientation, and other demographic markers that shape the health experiences of Black men in different social and geographical contexts.

Methods: We conducted qualitative interviews with 90 self-identified HIV negative/unknown status American African/Asian-Pacific Islanders (AAPI). The number of HIV cases is increasing at a higher rate for AAPI than for any other group, and AAPI comprise the only racial/ethnic group with an increase in the prevalence of AIDS cases. The purposes of this study were to (1) compare (race and antiretroviral (ARV)-related) symptoms experienced by AAPI and others and (2) examine substance use as a symptom management strategy among FLWHA in care.

Results: AAPI reported higher rates of occurrence for all symptoms except nausea than any other group (p<0.05). However, there was a statistically significant difference in occurrence of depression symptom between AAPI and AA (p=0.08). Depression (Chi-square tests followed by Bonferroni post hoc test). Diarrhea was associated with depression, dyspepsia with depression and anxiety. In past 6 months 14.8% reported an STD symptom. Provision of phone number was associated with drivers, those who had phone number were 2.5 times more likely to represent a higher proportion of the population than FLWHA in care.

Conclusions: The results of this study suggest that AAPI are more likely to suffer from HIV-related symptoms and substance use, and may require interventions to manage unwanted symptoms especially depression and anxiety.

Presenting author email: dmalebranched@gmail.com
**WEPE0481**

**Engagement in methadone maintenance therapy predicts initiation of antiretroviral therapy among First Nations illicit drug users in a Canadian setting**

M. J. Millroy1, T. Kern1, J. Montaner1, E. Wood1

1UBC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 2University of British Columbia, School of Population and Public Health, Vancouver, Canada, 3University of British Columbia, Faculty of Medicine, Vancouver, Canada

**Background:** As in other settings, indigenous people in Canada suffer from a disproportionate burden of HIV/AIDS. We have previously reported that First Nations individuals who use injection drugs (IDU) were significantly less likely to access antiretroviral therapy (ART), even in a setting of free and universal access to HIV care. In this study, we sought to identify factors associated with ART initiation among a community-recruited cohort of HIV-seropositive First Nations illicit drug users.

**Methods:** Data for these analyses came from the AIDS Cohort to evaluate access to Survival Services (ACCESS), an ongoing prospective cohort of HIV-seropositive IDUs recruited in Vancouver’s Downtown Eastside neighbourhood. Data from semi-annual interviews was linked to comprehensive ART and clinical monitoring records from the region’s universal HIV treatment programme. Time to first initiation of ART was modelled using Cox Proportional Hazards regression.

**Results:** Between May 1996 and May 2009, 190 ART-naïve First Nations participants were recruited and included in these analyses, including 107 (56.3%) women. At baseline, their median age was 33.4 years (Inter-quartile range [IQR]: 26.5 - 40.4). Over the study period, 111 (58.4%) participants initiated ART; median time to initiation or last-censoring was 26.2 months (IQR: 4.4 - 47.9). In a multivariate model including baseline CD4+ cell count and factors significant in bivariate analyses, factors independently associated with ART initiation were: current methadone maintenance therapy (Adjusted Hazard Ratio [AHR] = 1.59, 95% Confidence Interval [95% CI]: 1.07 - 2.37, p = 0.022); at least one lifetime arrest (AHR = 0.55, 95% CI: 0.33 - 0.89, p = 0.015); and being female (AHR = 0.48, 95% CI: 0.30 - 0.77, p < .05). Next steps: our findings underline the beneficial role opioid substitution programmes can play in treatment for HIV infection. Culturally-appropriate efforts directed by First Nations groups to increase uptake of methadone maintenance therapy are needed.

**Presenting author email:** mjmillroy@denet.ucbc.ca

---

**WEPE0482**

**Information seeking and HIV testing among immigrants in Portugal**

S. Dias1, A. Gama1, M. Severo1, H. Barros1

1Institute of Hygiene and Tropical Medicine, International Health, Lisbon, 2Porto Medical School, Department of Hygiene and Epidemiology, Porto, Portugal

**Background:** Immigrants are considered particularly vulnerable to HIV/AIDS. Although data on HIV prevention among migrants is scarce, studies have shown a reduced utilization of HIV prevention services, HIV information and testing are important components for prevention as may help to limit further transmission of the disease. This study aimed to describe information seeking and HIV testing rates among immigrants, and identify factors associated with testing.

**Methods:** Data were collected through a survey applied to 1513 immigrants selected through a snowball sample from 1513 immigrants (53% men) at the National Immigrant Support Centre, in Lisbon. The magnitude of the differences between HIV testing and socio-demographic variables was estimated by crude and adjusted odds ratios, with 95% confidence intervals using logistic regression.

**Results:** Among participants, 10% reported not knowing where to go if they had HIV-related issues; 80% reported that would use National Health Service (NHS). Most participants (62.8%) stated that they would have used HIV information from doctors, few from internet (20.6%) and friends or relatives (6.6%). Only 9.2% reported to have used the NHS for HIV information. Approximately 49% of participants reported having never had an HIV test. After adjusting for potential confounders, having been HIV tested was significantly associated with age, educational level, country of origin and knowing someone infected. Being male and undocumented were associated with significantly lower odds of having been HIV tested.

**Conclusions:** Our results suggest a lack of information about and low use of HIV prevention services among immigrants. A large amount of respondents were never tested, mainly male and undocumented. The findings of this study may contribute to develop tailored strategies to promote HIV prevention services utilization among these groups.

**Presenting author email:** smdias@yahoo.com

---

**WEPE0483**

**Use of advocacy and information materials in ethnic languages: a cultural sensitive approach in Bangladesh**

R. Akhter1, N.U. Ahmed1, M.K.A. Haque1, D.F. Sultan1, M.M.S. Siddique2, D.S. Choudhury1

1Save the Children USA, HIV/AIDS Sector, Dhaka, Bangladesh, 2Doshkhen Manobik Unnayan Kendra, HIV Prevention Project, Dhaka, Bangladesh

**Issues:** The Chittagong Hill Tract region, located in the southeast corner of Bangladesh has an area of 5,002 square kilometers and is home to 11 ethnic minorities who differ from the population in the neighboring plains not only in terms of geographical setting but also in ethnicity, socio-economic status, language, culture and religion. Chakma is the largest indigenous group, followed by Marma. Beautiful landscape and the colorful tribal life attract the tourists. Thus the people of this hilly region are more at risk of HIV/AIDS than elsewhere in the country. They continue to have misconceptions about the disease due to a lack of access to information on HIV/AIDS carried out by NGOs. Linguistic barrier and lack of culturally effective and acceptable advocacy materials makes it difficult for them to understand the magnitude of the problem.

**Description:** Save the Children through Global Fund supported project targeted to develop advocacy and information materials in three ethnic languages such as Chakma, Marma and Tipura to prevent HIV/AIDS. Through a process of involving Hill District Councils and the Tribal Cultural Institute, a Material Development Workshop was held where in the experts on the three local languages developed advocacy materials for target audience groups like community leaders and parents. The materials were field tested among the target audiences to make those culturally effective and acceptable. A total of 225000 materials in Chakma, Marma and Tipura were distributed to community leaders and parents to equip them with HIV information.

**Lessons learned:** Use of advocacy materials in ethnic languages has proved as effective tool to communicate with community leaders and parents with updated information on HIV and enable them to understand their own roles and responsibilities in HIV/AIDS prevention.

**Next steps:** The advocacy materials in ethnic languages have encouraged people to plan to develop more such materials and include other major ethnic groups such as Santhals.

**Presenting author email:** rakter@savechildren.org

---

**WEPE0484**

**HIV risk behaviors and experience of racism among young Hispanic men who have sex with men in South Florida**

R. J. Jacobs1, M. I. Fernandez1, G.S. Bowen1

1Nova Southeastern University, Preventive Medicine & Psychiatry and Behavioral Medicine, Ft. Lauderdale, United States, 2Nova Southeastern University, Preventive Medicine & Public Health, Ft. Lauderdale, United States

**Background:** In the United States, half of the HIV cases among Hispanics are men who have sex with men (MSM). Many Hispanic MSM experience oppression in the form of racism, discrimination, and stereotyping, and these experiences have been associated with HIV risk behaviors and experience of racism among them.

**Methods:** We collected quantitative data on sexual behaviors and drug use from 105 sexually active YHMSM aged 18-29 years (M=24 years; SD=3.2) recruited through snowball and community based recruitment in South Florida. Quantitative data were collected through Audio Computer Assisted Self Interviews (ACASI) offered in English and Spanish. We used the quantitative data to create a sampling frame stratified by age and sexual risk and selected a purposive sample of 10 YHMSM to participate in qualitative in-depth audio taped interviews. Results: Eighty percent of the participants reported being HIV-negative (the rest either refused to answer or did not know their status). All the participants had at least one anal sex partner in the past 6 months (mean=7; median=1), reported high rates of unprotected anal sex (70%), and multiple sex partners (66%). Fifty-nine percent of the participants who were the receptive partner and 62% who were the insertive partner did not use a condom. Twenty-one percent reported they had used alcohol or recreational drugs before and/or during sex. Thirty-one percent met sex partners via the Internet; 22% met them at a bar/club. Correlation analyses showed more experience of racism was associated with unprotected sex, r = .322, p < .05.

**Conclusions:** There is strong evidence that a significant proportion of young Hispanic men who have sex with men continue to engage in HIV-risk behaviors. Interventions tailored to the needs of young Hispanic MSM -- a heavily impaired subgroup stigmatized by virtue of their sexual orientation and Hispanic ethnic minority status -- that address socio-contextual issues such as experience of racism are needed.

**Presenting author email:** rjJacobs@nova.edu

---

**WEPE0485**

**Perception of HIV among Asian American men who have sex with men**

B. Blake, G. Taylor, L. Robley

Kennesaw State University, Nursing, Kennesaw, United States

**Background:** Only 30% of Asian Americans living in the United States (US) have ever been HIV tested. This is the lowest testing rate among Asian ethnic minority groups in the US. Among Asian Americans men, high risk sexual contact with another man men for account more than 75% of new HIV infections.

**Methods:** Asian American men who have sex with men (MSM) were recruited from a community based organization providing services to Asian Americans living in a metropolitan area in the southeastern US. Individual interviews were conducted with HIV-positive MSM and a structured group interview was conducted with Asian American men who have sex with men.
have two times probability to not participate in education compare to children living in non PLWHA household. These family and OVC is lack of educational and care in their regions. Their issues require that related to chil-
dren living in PLWHA household, and National AIDS Commission not apply this. This research provide recommen-
dation; aside of cost education related and awarding of scholarship, work
scheme which suitable for children, family and society based responses, and
counseling by teacher.
Presenting author email: fta.rzk1.utami@gmail.com

WEPE0486
Adelante: strengthening the response to HIV/AIDS and viral hepatitis in Latino communities
F. Ruiz
National Alliance of State and Territorial AIDS Directors - NASTAD, Racial and Ethnic Health Disparities, Washington, United States

Issues: The HIV/AIDS epidemic disproportionately affects the Latino popula-
tion in the United States. Although representing 16 percent of the U.S. pop-
ulation, they accounted for nearly 22 percent of the new HIV/AIDS diagnoses among adults and adolescents from 2006 to 2008, and dependent areas in 2006.
Description: The National Alliance of State and Territorial AIDS Directors (NASTAD) released (Adelante! - A Call to Action to further heighten the re-
sponse to HIV/AIDS in Latino communities by calling for coordinated and
decisive action from health departments and the communities they serve. NASTAD also progressed well and review the outcomes of the two statewide meetings were participants developed targeted and
tailored action plans which outline how each state will move forward to
reduce the devastations impact of HIV and viral hepatitis among Latinos in their state.
Lessons learned: Building on Adelante!, NASTAD held statewide meetings in Arizona and Illinois. The goals of the meetings were to strengthen the abil-
ity of state and territorial partners to effectively implement HIV and viral hepatitis programs targeting Latino communities. The meeting provided a platform for participants to review state-specific trends in Latino communi-
ties, strategies to increase synergy between programs within health departments and among other key stakeholders, to identify potential programmatic gaps in services, and to build capacity and infrastructure to effectively address these diseases.
Next steps: NASTAD seeks to implement similar meetings with a new con-
sortium to continue meaningful dialogue and robust partnerships that
ultimately strengthen national and local efforts to reduce new infections and
ensure access to quality care and treatment for Latinos living with HIV/AIDS.
Presenting author email: frui2@nastad.org

Research and programmes with
children
WEPE0487-WEPE0489
Impact the existence of PLWHA in household toward education participation of children aged 7-18 years old in seven provinces of Indonesia in year 2007
F. R. Utami
University of Indonesia, Biostatistics, Depok, Indonesia

Background: Study of Family and Orphan and Vulnerable Children (OVC) of HIV and AIDS year 2007 in seven provinces in Indonesia show that school attendance,
atainment, and perception to continue schooling among chil-
dren in PLWHA household lower than children living at non PLWHA household.
Results: This research found that children living in PLWHA household have
two times probability to not participate in education compare to children living in non PLWHA household. These family and OVC is lack of educational and care in their regions. Their issues require that related to chil-
dren living in PLWHA household, and National AIDS Commission not apply this. This research provide recommen-
dation; aside of cost education related and awarding of scholarship, work
scheme which suitable for children, family and society based responses, and
counseling by teacher.

WEPE0489
The role of psychosocial support in family HIV care clinics at government-run health facilities in Uganda: lessons from the Ariel children’s clubs (children’s support groups)
J.E. Angulo1, E. Bitarakwate2, L. Munungi, W. Salmond2, C. Nanyunja2
1Elizabeth Glaser Pediatric AIDS Foundation, Program/psychoSociaL, Kampala, Uganda, 2Elizabeth Glaser Pediatric AIDS Foundation, Program/psychoSociaL, Kampala, Uganda
Issues: Elizabeth Glaser Pediatric AIDS Foundation (Uganda) initiated a com-
prehensive family care model at six health units in 2008. Services included
community-level linkages to increase identification of HIV-exposed children
and their families as well as access to PMTCT, care, treatment and support
services. Children’s support groups were introduced at the health units to ‘en-
able HIV-infected children to live a quality life,’ where a child’s psychological,
physical, spiritual and social needs are being met. The children’s ages range from
6-18 years.
Description: Children take many routes to enroll in the clubs and into care.
HIV-positive mothers in the PMTCT program and those enrolling in family sup-
port groups are encouraged to test all their children. HIV-positive children are
enrolled in the club and into the clinic, where they receive comprehensive HIV
care. Children meet monthly and engage in activities like education,
health talks and entertainment (games, music, dance, drama and debates). They are
also provided with a nutritional meal. Children are followed up by health worker
ners and peer educators in their homes to ensure adherence to drugs.
Lessons learned: The number of children in the clubs increased from 95 to
375 within a period of one year (2008-2009). 155 were enrolled into compre-
hsive HIV care and 36 were on antiretrovirals. Club meetings provide the
children with constructive and fun activities to help them come to terms with
their chronic illness. Through the club’s activities, children’s emotional and
psychological needs are being attended to.
Next steps: Integrating treatment programs with psychosocial support is
vital for the success of any program, especially for children. The peer support
provide children for each other; the clubs encourage children to move on in life and others are ready to share their experiences and advocate for the
rights of children living with HIV/AIDS at different occasions.
Presenting author email: Jeangulo2002@yahoo.co.uk
WEPE0490
Results of a pilot intervention for HIV+ clients experiencing concurrent mental health and substance use problems
K. McShane2,3,7, K. Balderson1,4, J. Maggi1,3,4, G. Birkhead4, B. Agins1, J. Morne5
Division of General Internal Medicine, New York, United States, 4New Presenting author email: sarah.stranks@gmail.com

Background: HIV+ patients with concurrent mental health and substance use disorders experience multiple problems that require both medical and psychological care. Since previous research suggests that conventional approaches often neglect this vulnerable patient group, this paper presents findings from a unique pilot intervention designed to address the unique clinical needs of HIV+ patients with concurrent mental health and substance use disorders. This paper (1) describes the overall patient population and (2) identifies specific factors that define successful outcomes.

Methods: The intervention took place in Toronto, Canada within an integrated care model and consisted of a psychiatrist and a nurse with a special training in substance use and mental illness. A retrospective chart review provides information on patients served. Due to modest sample size, variables were examined in terms of distributional properties and planned comparisons were explored via independent samples t-tests Pearson’s chi-square analyses.

Results: 66.7% of the patients were experiencing a mood disorder and 70.4% had an Axis I diagnosis. Alcohol was the most popular substance of choice, followed by cocaine and crack, cannabis, party drugs, crystal methamphetamines/amphetamines, hallucinogens, and prescription drugs. 59.3% used solely one substance and 51.9% misused drugs for more than 10 years. 40.7% completed the intervention and either became abstinent or reduced use compared to other patients.

Conclusions: This research highlights that HIV+ adults experiencing concurrent substance use and mental health problems represent an underserved patient population that is in clear need of both medical and psychiatric services. Substance use disorders experience multiple problems that require both medical and psychological care. Since previous research suggests that conventional approaches often neglect this vulnerable patient group, this paper presents findings from a unique pilot intervention designed to address the unique clinical needs of HIV+ patients with concurrent mental health and substance use disorders. This paper (1) describes the overall patient population and (2) identifies specific factors that define successful outcomes.

WEPE0493
Mania and cocaine use as longitudinal predictors of sexual risk in patients with co-occurring bipolar and substance use disorders: a 15-month prospective study
C.S. Meade1, A.K. Sanchez2, G.M. Fitzmaurice3

Substance use in patients with HIV/AIDS: HIV clinical guidelines for the primary care practitioner
H. Cruz1, K. Cavo1, M. Gourevitch1, S. Starcic2, B. Sciscioni1, T. Hatton1, G. Leavitt1, D. Agar1, B. Moore1
New York State Department of Health, AIDS Institute, New York, United States, 2Johns Hopkins University School of Medicine, Division of Infectious Diseases, Baltimore, United States, 3University of Virginia School of Medicine, Division of General Internal Medicine, New York, United States, 4New York State Department of Health, AIDS Institute, Albany, United States

Issues: The prevalence of substance use disorders among HIV-infected individuals has been estimated to be at least 25%. In addition to contributing to transmission, substance use directly affects the health of the HIV-infected patient by interfering with adherence, interacting with ART medication, and increasing the risk of co-morbid conditions. The issues of prevention and chronic management that are unique to the substance-use population often do not receive the attention they merit in primary care treatment of PLHIV.

Description: This printed edition is the first formal set of guidelines devoted to the management of alcohol and substance use among BD patients, and continued drug use may confer additional risk. This paper describes the overall patient population and (2) identifies specific factors that define successful outcomes.

Methods: The intervention took place in Toronto, Canada within an integrated care model and consisted of a psychiatrist and a nurse with a special training in substance use and mental illness. A retrospective chart review provides information on patients served. Due to modest sample size, variables were examined in terms of distributional properties and planned comparisons were explored via independent samples t-tests Pearson’s chi-square analyses.

Results: 66.7% of the patients were experiencing a mood disorder and 70.4% had an Axis I diagnosis. Alcohol was the most popular substance of choice, followed by cocaine and crack, cannabis, party drugs, crystal methamphetamines/amphetamines, hallucinogens, and prescription drugs. 59.3% used solely one substance and 51.9% misused drugs for more than 10 years. 40.7% completed the intervention and either became abstinent or reduced use compared to other patients.

Conclusions: This research highlights that HIV+ adults experiencing concurrent substance use and mental health problems represent an underserved patient population that is in clear need of both medical and psychiatric services. Substance use disorders experience multiple problems that require both medical and psychological care. Since previous research suggests that conventional approaches often neglect this vulnerable patient group, this paper presents findings from a unique pilot intervention designed to address the unique clinical needs of HIV+ patients with concurrent mental health and substance use disorders. This paper (1) describes the overall patient population and (2) identifies specific factors that define successful outcomes.

Next steps: Consolidate findings, develop training tool kit, scale up. Presenting author email: karyn.kaplan@gmail.com

Abstract Book Volume 2 | www.aids2010.org 165
WEPE0494 Reducing smoking prevalence among people living with HIV in Queensland, Australia through a clinician led strategy
S. Lambert1, B. Watts2, B. Henry3, J. Leamy4, J. Hooper5, B. Jennifer6, Y. Van Der Lus7
1The University of Queensland, School of Medicine, Brisbane, Australia, 2Queensland Positive People, Brisbane, Australia, 3Queensland Health, Sexual Health Services, Gold Coast, Australia, 4Queensland Health, Sexual Health Services, Cairns, Australia, 5Queensland Health, Toowoomba Hospital, Toowoomba, Queensland, Australia, 6Queensland Health, Sunshine Coast, Australia, 7Queensland Health, AIDS Medical Unit, Brisbane, Australia, 8Queensland Health, Alcohol and Drug Service, Metro North, Brisbane, Australia

Issues: The negative effects of smoking on health are amplified in persons with HIV and Queenslanders with HIV smoke at twice to three times the rate of Queenslanders without HIV. This is despite the fact that Queenslanders with HIV are well connected to the health care system. Anecdotal reports have suggested that clinicians caring for Queenslanders with HIV are not confident in their capacity to assist patients to cease smoking.

Description: A clinician led intervention to assist PLWHIV to give up or cut down smoking was undertaken in 2009 and 2010. A survey of smoking rates prior to the intervention undertaken in February 2009 shows 335 responses (22%) were received from PLWHIV in Queensland. 48.45% of respondents indicated they currently smoked. This is in keeping with national Australian data. As well as a higher smoking rate, PLWHIV were more likely to have smoked longer and more likely to be smoking more than other Australians who smoked. Individuals who had discussed their smoking with their clinician were more likely to want to give up smoking at present and more likely to have attempted in the past (p=0.009). The clinician led intervention consisted of 12 individual strategies to assist the clinician raise smoking habits with PLWHIV.

Lessons learned: PLWHIV who smoke are more likely to be long term heavy smokers compared to others who smoke. Clinicians have a vital role to play in assisting PLWHIV to reduce their smoking intake. Clinicians require assistance to develop strategies to be able to raise smoking habits with PLWHIV that is sensitive and meaningful.

Next steps: The 12 individual strategies will be evaluated in the first half of 2010 and a post intervention study of smoking rates will be conducted in mid 2010.

Presenting author email: s.lambert@uq.edu.au

WEPE0495 Towards legalization of medical cannabis: addressing the freedom of speech problem
F. Navarro, S. Soltani
Act Up Paris, Paris, France

Since the Dronabinol and marijuana in HIV-positive marijuana smokers study in 2007, science recommends medical cannabis (MC) to fight side effects of antiretroviral treatment. Yet PLWHIV in many countries still don’t have access to MC, and in many of those countries, positive statements about any drug are penalized. In France any unauthorised public mention of drug use is illegal, which until recently had precluded a public debate about the need for people on antiretroviral treatment to access MC.

Act Up-Paris is a PLWHIV-based AIDS activist group in France. This paper presents a sequence of actions by Act Up-Paris between June 2009 and January 2010 to promote PLWHIV’s right to access MC. We will describe how Act Up-Paris, with other members of the French MC movement,

1. Managed for the November 2009 Symposium of Drug Users to focus on MC;
2. Prepared a first-person testimony on HIV+ use of MC during the opening press conference;
3. Crafted the first-person announcement of cannabis use with lawyers expert in the prohibition of favourable statements about drugs;
4. Booked a star lawyer to speak at the [EGUS];
5. Engaged in extensive media work to get the [EGUS] and the first-person testimony reported.

The carefully redacted first-person discourse protected Act Up from prosecution for promoting MC use. As a new and emotional discourse, it also proved exceptionally popular in the media. This also allowed the birth of an informal collective of MC users. Most importantly, this has allowed the breaking the omerta and the unmaking of the taboo around MC.

Creation of a formal organizationay in MC users. Integration within international networks of sibiling organizations. Leveraging of public visibility towards an official Parliament bill to legalize MC.

Presenting author email: frigoule.navarro@hotmail.fr

WEPE0496 The impact of injection drug use cessation and antiretroviral therapy on smoking cessation among HIV-infected injection drug users in Baltimore, MD 1988-2008
B.K. Ambrose, G.D. Kirk, S.H. Mehta
Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, United States

Background: Heavy tobacco use is common among persons living with HIV/AIDS (PLWHI) and injection drug use (IDU) is a primary risk factor for acquiring HIV infection. Effective antiretroviral therapy (ART) has dramatically improved survival, tobacco-related disease burden, and quality of life. We sought to identify factors associated with tobacco cessation among HIV-infected participants within a cohort of current and former IDUs living in Baltimore, MD.

Methods: Participants of the longitudinal ALIVE study who reported cigarette smoking at baseline, were interviewed, and attended their semi-annual visits from 1988-2008 were evaluated. Kaplan-Meier estimates and discrete time proportional hazards models were used to assess the relative hazards for first reported quit attempt.

Results: Of 1,022 participants, 30% were female and the median age at baseline was 35 years [IQR=30-49]. At study entry, 88% reported current injection drug use and 52% reported smoking >= 1 pack/day. 292 individuals reported at least one attempt to quit smoking (current smokers at study entry 49%) with the median age at first quit attempt: 43 years [IQR=37-46]. In multivariate analysis, recent injection drug use cessation was associated with an increased likelihood of quitting smoking (HR= 2.0, 95%CI: 1.6, 2.5). Virological response to ART (RH = 0.70, 95%CI: 0.52, 0.93) and increasing CD4 levels (250-350 vs. < 250 RH=0.73, 95%CI: 0.56, 0.95); 350-500 vs. < 250 RH=0.69, (95%CI: 0.53, 0.89); >500 vs. < 250 RH=0.77, (95%CI: 0.61, 0.96) were significantly associated with a decreased likelihood of quitting smoking, as were alcohol and marijuana use.

Conclusions: While alcohol and marijuana use remain significant barriers to tobacco cessation, recent cessation of injection drug use presents an important opportunity to address tobacco smoking. Despite increased interaction with healthcare providers, HIV-infected individuals successfully receiving ART appear less likely to quit smoking. HIV care providers must increase utilization of evidence-based cessation strategies to address the disproportionate burden of tobacco use among persons living with HIV/AIDS.

Presenting author email: bambrose@jhsph.edu

WEPE0497 The national drug abuse treatment clinical trials network: an agent for HIV/AIDS prevention and awareness
M. Michel1, B. Taï2
1National Institute for Drug Abuse, Rockville, United States, 2Center for Clinical Trials Network, Metro North, Brisbane, Australia

Issues: Drug Abuse contributes to the spread of HIV/AIDS for both injection and non-injection users. Treatment for drug abuse often takes place in community practices and these offer an opportunity to engage patients who are at high risk for HIV infection, and provide strategies to change behaviors that contribute to the spread of infection.

Description: The National Institute on Drug Abuse initiated the Clinical Trials Network (CTN) in 1999 to bring new treatment strategies to community treatment providers and serve as a platform for training. The CTN comprises 16 academic medical centers and 240 Community Treatment Practices (CTPs) across the US. The CTN has proven a effective vehicle for conducting HIV/AIDS research and in promulgating results of the studies. A successful strategy used was a multi-site trials network to address risky behaviors in injection drug users (Bohn), drug abusing men (Calzyn) and women (Tross) showed that CTP counselors deliver effective HIV/AIDS prevention strategies. A recently completed trial (Metsch) showed that rapid testing for HIV could be brought into the CTP environment.

Lessons learned: Drug Abuse Community Practices are excellent locations to introduce behavioral interventions aimed at reducing risky behaviors, including injection use and sexual practices. These effects were positive in methadone centers as well as drug free practices. Training of skills is particularly important and the CTN seeks to provide effective methods to as broad an audience as possible, including investigators and practitioners outside the US.

Next steps: The CTN will be on its success to continue the HIV/AIDS research within the Network. Ongoing research includes another large trial examining rapid testing and counseling in STD clinics. The CTN experience should be shared.

Presenting author email: mm108w@nih.gov

WEPE0498 Correlates of frequent marijuana use among a cohort of men who have sex with men (MSM) infected with or at risk for HIV in the multicity AIDS cohort study (MACS)
W.-K. Kuo, MACS
Ayaya University, National Science and Public Health, Abu Dhabi, United Arab Emirates

Background: Anecdotal reports about marijuana’s alleviating effects on terminally ill patients have become widespread. This suggests a potential increase in therapeutic use among people with HIV, particularly those at an advanced stage of the disease. This study sought to determine the rates and trends of frequent marijuana use among HIV-infected and uninfected men who have sex with men (MSM), to identify correlates of frequent marijuana use, and to test its association with severity and complications of HIV disease.

Methods: We used the publicly available dataset of Multicenter AIDS Cohort Study (MACS), which was collected between 1984 and 2005. Data were collected on semiannual basis and frequencies of marijuana use were recorded every visit. Use of marijuana at least on weekly basis was defined as “frequent.” Generalized estimating equation (GEE) was used to test the relationship between frequent marijuana use and the following factors: age, HIV disease stage of the disease. This study sought to determine the rates and trends of frequent marijuana use among people with HIV, particularly those at advanced stage of the disease. The study sought to determine the rates and trends of frequent marijuana use among HIV-infected and uninfected men who have sex with men (MSM), to identify correlates of frequent marijuana use, and to test its association with severity and complications of HIV disease.

Results: We had 30,000+ participants in our analysis. Comparing rates of frequent marijuana use declined in 1980s, climbed again through 1990s, and reached its peak in 2001 at 49.4%. Generally, HIV-infected MSM had higher rates of frequent marijuana use (OR=2.3, p< .05). Those report- ed AIDS-related complication also had higher rates of frequent marijuana use (OR=1.3, p< .05). Younger age, use of other illicit substances such as cocaine, crack, and popper was associated with frequent marijuana use in...
this cohort. There were no racial difference among the MACS participants in marijuana use.  

**Conclusions:** Compared to our earlier study of women infected with and at risk for HIV from Women's Interagency HIV Study (WIHS), there were higher rates of frequent use of marijuana in this cohort of US MSM. There was also indirect evidence that, in addition to recreational use, marijuana may be used for therapeutic purposes in this cohort of MSM.  

**Presenting author email:** wenhung.kuo@ou.edu.ac

WEPE0499  
The need for an effective national alcohol policy in the prevention of HIV/AIDS among young people  

S. Mutawae  
Uganda Youth Development Link, Programmes, Kampala, Uganda

**Issues:** World Health Organization (2004) ranked Uganda as the leading con-  
ssumer of alcohol in the world with 19.47 liters per capita. Alcohol contributes 10% of country revenue and has been reported as number five major cause of poverty. Alcohol abuse is now a major influence in the sexual risk behav-  
ior of young people (12-24 years) and one of the most important drivers of  
HIV/AIDS epidemic in Uganda. Young people prefer strong local spirits which are easily accessible and concealed in miniature sachets at very low prices. Indicators of alcohol related problems include death, unintended intoxication,  
risky sexual activities commercial sex and unprotected sex.  

**Description:** Uganda Youth Development Link is implementing a project supported by International Organization of Good Templers whose goal is to  
reduce alcohol related harm among young people below 24 years through  
increasing awareness on alcohol related harm and its relationship with HIV/  
AIDS and lobbying for alcohol controls on sale, consumption and advertisings  
in Uganda. Media campaigns, community education and peer education clubs have been conducted to achieve this.  

**Lessons learned:**  
There is need to reduce HIV/AIDS risk by addressing the root causes such as:  
• Alcohol abuse through increased public awareness about its relation with  
HIV.  
• Statutory regulation should be promoted to restrict alcohol consumption  
rather than the self regulation concept being fronted by the alcohol  
industry.  
• HIV/AIDS programmes should recognise the contribution alcohol makes  
to HIV transmissions and devise appropriate preventive strategies targeting young people.  

**Next steps:**  
• Alcohol packed in miniature sachets (polythene bags) should be banned  
by government to address sale to minors; limit accessibility, packaging  
and availability of alcohol to young people.  
• Appropriate health warnings or messages should accompany all alcohol  
marketing and advertising; the use of direct or indirect incentives such as  
sales promotions should be prohibited.  

**Presenting author email:** mutawae2@yahoo.com

WEPE0500  
Women in peril: the health care needs of latina HIV/AIDS  

G. Caraballo-Carreño, C. Abrego-García  
Center for Evaluation and Sociomedical Research, Graduate School of Public  
Health, San Juan, Puerto Rico

**Background:** Women are the fastest growing segment of the US prison popu-  
lation. According to the US Bureau of Prisons, nearly 80% of female inmates  
are incarcerated for a drug-related offense. The high prevalence of injecting  
drug users has also contributed to disparities in the prevalence of HIV/AIDS  
among incarcerated women. Because women comprise less than 10% of the total  
US prison population, their health care and social needs are frequently sub-  
ordinated to those of male inmates and services rendered do not always take  
into account the context of women’s lives. This work describes the socio-de-  
mographic and health characteristics of female inmates living with HIV/AIDS  
and implications for the transition from prison to community.  

**Methods:** A representative sample of the inmate population in the Puerto  
Rico correction system in 2005 was surveyed to assess drug treatment needs.  
Data was obtained on 1,179 respondents (89.7% response rate; 19% were  
female inmates). Questionnaires were administered through two interview  
modalities: Computer Assisted Personal Interview for social and health vari-  
ables; Audio Computer Assisted Self Interview was used for sensitive infor-  
mation related to lifetime use of illicit drugs and alcohol and drug and alcohol  
use in prison.  

**Results:** 62% are 35 years old or younger. 11% reported being HIV-posi-  
tive, 30% are infected with the HCV. 69% have a substance abuse disorder. 85% present co-morbidity with a psychiatric condition. 88% have a remaining  
sentence of 4 years of less while 61% of them have been incarcerated more  
than once.  

**Conclusions:** Health care needs of female inmates infected with HIV/AIDS  
pose significant public health challenges. Implications for services planning  
with a public health framework will be presented.  

**Presenting author email:** glorimar.caraballo@upr.edu

WEPE0501  
The relationship between homosexuality laws, alcohol use and HIV risk behavior of men who have sex with men in 16 cities of the United States  

B. S. Rosser1, M. Oaks1, R. Jones-Webb1, S. Brady1, K. Horvath2,  
D. Carpenter1, D. Smolenski1, G. Killian1, R. Morgan2  
1University of Minnesota School of Public Health, Division of Epidemiology  
and Community Health, Minneapolis, United States, 2University of Minnesota,  
Law School, Minneapolis, United States

**Background:** Structural factors research has not previously examined  
whether laws related to homosexuality impact the risk behavior of men who  
have sex with men (MSM) in the United States. The Structural Interventions  
to Lower Alcohol-related STI/HIV risk (SILAS) study was designed to explore  
the relationship between legislation on homosexuality and three behavioral  
risk factors for MSM: alcohol use, unsafe sexual behavior and alcohol-related  
unsafe sex.  

**Methods:** Sixteen U.S. cities were selected based upon laws regarding recog-  
nition of same性 relationships, gay adoption, anti-discrimination in employ-  
ment and recognition of hate crimes. Eight cities with pro-homosexual laws  
and 8 with anti-homosexual laws were pair-matched on population, demo-  
graphic composition and region. Banners advertisements on the nation’s two  
largest gay websites were used to recruit 1,725 MSM participants; 1,038 from  
the pro-cities and 687 from the anti-cities.  

**Results:** Overall, participants reported significantly higher alcohol use than  
the national average for males. Compared to participants in the anti-cities,  
participants in the pro-cities reported significantly less heavy alcohol use  
(AOR = 0.73, p = 0.006), but no differences in at-risk drinking, unsafe sex, or  
alcohol-related unsafe sex were observed.  

**Conclusions:** Except for heavy drinking, results suggest little association be-  
tween negative legislation concerning homosexuality and alcohol use or risky  
sexual behavior. Results will be replicated over time to determine whether  
the relationships observed in this study persists.  

**Acknowledgement:** NIH-NIDA award number R01AA016270-01A1 funded  
this study.  

**Presenting author email:** rosser@umn.edu

WEPE0502  
Demographic, health, and psychosocial correlates of cigarette smoking status among persons living with HIV  

T. Bekete1, S. Rueda2, S. Gardner1, J. Bacon1, R. Kennedy1, S. Rourke1,  
1The OHTN Cohort Study Team  
Ontario HIV Treatment Network, Toronto, Canada, 2University of Toronto,  
Toronto, Canada, 3The Ontario AIDS Network, Toronto, Canada

**Background:** People living with HIV in Ontario report high rates of cigarette  
smoking. We examined demographic, health, and psychosocial correlates of  
cigarette smoking in this population.  

**Methods:** Data for this cross-sectional study is from a prospective cohort  
of individuals living with HIV in the province of Ontario, Canada. The main  
outcome of interest was self-reported cigarette smoking status (i.e., current  
smoker, former smoker, and never smoker). Multinomial logistic regression  
was used to identify correlates associated with cigarette smoking status.  

**Results:** Of the 1,019 participants, 82% were male and 17% were female.  
One-third (34%) were current smokers, 24% were former smokers, and 41%  
ever smoked cigarettes. Two-thirds identified as Gay, Lesbian, or Bisexual;  
65% were non-Caucasian, 55% were unemployed, and 46% had an annual  
income of CAD$30,000 or greater. Nearly three-fourths (73%) had consumed  
alcoholic drinks in the past year and 16% had used illicit drugs in the past  
6 months. Compared to non-smokers, current smokers were significantly  
(p = 0.05) more likely to be male (OR=2.7), younger (OR=1.02), Caucasian  
(OR=2.2), have low education (OR=2.4), be employed (OR=2.1), have  
infrequent sexual activity (OR=1.18), be heavy drinkers (OR=2.7), use illicit  
drug (OR=2.0), and have higher level of stress (OR=1.09). They were, however,  
less likely to report experiencing HIV-related stigma (OR=0.9). Results of the  
multinomial regression also showed that, compared to non-smokers, former  
smokers were more likely to be male (OR=2.9), older (OR=1.02), Caucasian (OR=2.6), and heavy  
drinkers (OR=1.8).  

**Conclusions:** Our study shows age, gender, ethnicity, education, employ-  
ment status, income, substance use and stress were correlates of smoking  
status. To be successful, interventions to reduce cigarette smoking in this  
population must take into account these correlates and address some of the  
other factors that may contribute to high rates of smoking.  

**Presenting author email:** tbekele@uhn.on.ca

WEPE0503  
Cigarette smoking is associated with poor physical health-related quality of life among persons living with HIV  

T. Bekete1, S. Rueda2, S. Gardner1, J. Bacon1, R. Kennedy1, S. Rourke1,  
1The OHTN Cohort Study Team  
Ontario HIV Treatment Network, Toronto, Canada, 2University of Toronto,  
Toronto, Canada, 3The Ontario AIDS Network, Toronto, Canada

**Background:** Research evidence indicates elevated prevalence of cigarette  
smoking and associated adverse health outcomes among people with HIV. Our  
objectives are to confirm the higher smoking rates observed elsewhere and  
examine the association between cigarette smoking and decreased physical  
health-related quality of life in HIV.  

**Methods:** This cross-sectional study uses baseline data from a prospective  
cohort of people with HIV in Ontario, Canada. The main outcome variable was  

167
WEPE0504

Men who have sex with men (MSM) accessing a large metropolitan sexual health and infectious diseases clinic in Melbourne, Australia - a psychological snapshot

T.M. Gibbs1, M. Hay2, A. Mijih

1The Alfred, Infectious Diseases Unit, Melbourne, Australia, 2Monash University, Faculty of Medicine, Nursing and Health Sciences, Melbourne, Australia

Background: MSM continue to be at highest risk for HIV infection in Australia. Despite widespread health promotion, a sustained increase in HIV notifications has occurred in Victoria. This study aimed assess the prevalence and type of psychological distress in MSM accessing a Victorian sexual health and infectious diseases clinic; and to explore differences in the psychological wellbeing of HIV-positive and HIV-negative MSM.

Methods: A cross-section convenience sample of 240 MSM attending for routine care (HIV-positive n=52, HIV negative n=188) were recruited. Participants completed self-report questionnaires including demographics, substance use and the Personality Assessment Screen (PAS). The PAS gives an overall score of study subjects along with 10 subscales representing distinct types of clinical problems.

Results: Over half (59%, n=140) of the total sample scored in the clinically significant range on the PAS total score. The domains of Negative Affect/Mood (60% clinically significant) and Suicidal Thinking (46% clinically significant) correlated the highest with overall psychological distress (r = 0.55, p = 0.00). Amphetamine use significantly correlated with overall psychological distress (r = 0.33, p = 0.00). Independent t-tests by HIV status revealed HIV-positive participants scored significantly higher on domains of Social Withdrawal (t(207) = -3.05, p = 0.003) and Health Problems (t(206) = -4.88, p = 0.00) but not on total scores (t(195) = -39, p = 0.69). HIV-negative participants self-reported binge drinking was significantly higher than that of HIV-positive participants (t(212) = 3.18, p = 0.001).

Conclusions: A subgroup of MSM attending primary health services display clinically significant psychological distress that warrants additional assessment. We found a concerning prevalence of mood disturbance and suicidal thoughts in this sample. The use of psychological screening in addition to sexual health assessment of MSM attending sexual health/ID clinics may provide valuable information for improving the well-being of this group.

Presenting author email: t.m.gibbs@alfred.org.au

WEPE0505

Alcohol and drug use among HIV-positive and HIV negative men who have sex with men

B.U. Moseini, R.M. Angelveldt, E. Klueman

1Gay and Lesbian Health Norway, Oslo, Norway, 2University of Tromsø, Tromsø, Norway

Background: Previous European and North-American research has shown a higher prevalence of alcohol and drug use among men who have sex with men (MSM) compared to men who have sex with women. However, within this group, homosexually experienced men are at risk for drug and alcohol abuse and its association with HIV-related sexual risk-taking has not been widely studied. The ongoing Norwegian research project, which is a co-operation between the University of Public Health and Gay and Lesbian Health Norway, is examining life forms as predictors of unsafe sex among men who meet their sexual partners over the Internet.

Methods: 2598 MSM were surveyed on the Norwegian gay internet site Gay-si.

Results: This study indicates that men who use the Internet to meet sexual partners are at increased risk for sexual behavior that is associated with HIV-related sexual risk-taking. However, levels of increased risk vary within the MSM population. Heterosexually experienced or bivocally active men and especially HIV-positive MSM, report higher and riskier alcohol or drug use (hashish/marijuana, heroin, GHB, ecstasy, cocaine, amphetamines, marijuana, and the internet). HIV-related sexual risk taking behavior, such as being intoxicated, more depressive/affective disorders and poorer general health among men who are HIV-negative or who are exclusively homosexually active.

Conclusions: HIV prevention among MSM in Europe/North-America has overwhelmingly focused on condom use and ignorance of sexual risk factors such as injecting and sexual intercourse. This study suggests that HIV prevention among MSM might become more effective by addressing a broader range of risk factors such as substance abuse, general psychological distress and the heterogeneity of risk within the population of individuals who report markers on non-heterosexual orientation. An undisputed identity as gay seems to protect against engaging in drug use or unsafe sex.

Presenting author email: bera@helseutd.net

WEPE0506

Use of alcohol and other drugs in caregivers in children in peri-urban KwaZulu-Natal, South Africa, an area of epidemic HIV infection

M. Taylor3, S. Kauchali1, L.L. Davidson1, M. Chhtagian1, J. Krasvliq1, S. Arpad2, C.A. Melling2, L. Sussen3, M. Crobo1, F. Bah1, Z.A. Stein2

1University of KwaZulu-Natal, Paediatrics and Child Health, Durban, South Africa, 2Columbia University Mailman School of Public Health, Epidemiology, New York, United States, 3University of KwaZulu-Natal, School of Public Health and Surgical and Surgeons, Pediatrics, New York, United States, 4Columbia University School of Public Health, Sociomedical Sciences, New York, United States, 5State National Psychiatric Institute, HIV Center for Clinical and Behavioral Studies, New York, United States, 6The Graduate Center of the City University of New York, Anthropology, New York, United States

Background: In the Aseroe study investigating preschool children’s health and development in peri-urban KwaZulu-Natal, households were surveyed to enroll 4-6 year old children and their primary caregiver. The former have a critical role in children’s development and the high prevalence of HIV in KwaZulu-Natal and negative effects of substance use could detrimentally influence the care children receive. We investigated the use/alcohol and other drugs (AOD), by caregivers, both HIV infected and uninfected.

Methods: The Alcohol Use Disorders Identification Test (AUDIT), a peer-referenced self-administered tool and the Client Diagnostic Questionnaire (CDQ), valid measures of substance use for lay researchers, were translated into isiZulu and administered to 1059 caregivers/primary caregivers by trained research assistants in the first year of the study.

Results: The prevalence of alcohol use was 17%, although 14% caregivers drank alcohol only once, 13% of these engaged in binge drinking (5 or more drinks on one occasion in the past 30 days), and 34% had smoked cigarettes in the past 6 months. Nearly one-third (37%) use an AOD (other drugs) in caregivers, both HIV infected and uninfected.

Conclusions: While traditionally in isiZulu communities women did not drink alcohol or use other substances, alcohol use is becoming more common and binge drinking may affect the safety and quality of care they care for. Professional assistance was required for a small group of caregivers who abused alcohol.

Presenting author email: sussen@google.com

WEPE0507

HIV, pain and drug use: Under-treatment and fear of medical opioid use among PLHIV and health care workers in Viet Nam

K. Green1, T. Tran2, H. Tran Vu2, T. Nguyen Nuyen3, R. Vu Ngoc4, T.N. Nguyen Thi, H. Nguyen Duc2, 1Family Health International, Hanoi, Viet Nam, 2L’HSTH, London, United Kingdom, 3RTCCD, Hanoi, Viet Nam, 4Life Centre, Hanoi, Viet Nam, 5Van Don District Hospital, Van Don, Viet Nam

Background: Very little is known regarding the prevalence of pain and related health seeking behaviors among people living with HIV with a history of injection drug use in Vietnam. A palliative care intervention study was implemented to explore the feasibility and effectiveness of integrating palliative care services, including pain assessment and treatment, into HIV outpatient clinic settings.

Methods: A quasi-experimental controlled trial was conducted with 822 PL-HIV (32% female) in two HIV out-patient clinics in northern Vietnam. The on-going study includes a double baseline, two rounds of post-intervention data collection, and an embedded qualitative study among patients and health care workers. Data reported here focus on pain and independent variables associated with pain. prevalence, severity and frequency were measured using the Memorial Symptom Assessment Scale and the Brief Pain Inventory.

Results: 70.7% of participants reported the presence of pain. Most (38.7%) experienced moderate to severe pain. 73.8% of participants were on ART or at time of baseline however ART was not significantly associated with pain. Drug use in the past 6 months was associated with increased risk of pain (P < 0.004). Women were slightly more likely to report pain (P < 0.01). A comparison between patient-reported pain and pain documented as a clinical symptom in patient records found pain recorded in 2.5% of cases. The most common treatment for pain was paracetamol (37.9%). Treatment using codeine or morphine was rare (5.5%). 80.5% of respondents stated that pain’s impact was the main reason for the current ART treatment. Both PLHIV (38.3%) and health care workers described fears related to medical opioid use. Primary concerns included addiction, previous drug use experiences.

Conclusions: Pain is not being adequately addressed among PLHIV in the two study clinics. Training and mentoring is required among doctors, hospital leaders and PLHIV to further build confidence in pain assessment and treatment.

Presenting author email: kim@fhi.org.vn
WEPE0508
Positive outcomes associated with a HIV prevention program for families residing in urban homeless shelters

N. Behar*1, M. McKay1, L. Bickman1, W. Bannatyne1, L. Goldstein1, C. O’Regan1, C. Bhat1, R. Lawless1, E. Miranda1, A. Miranda1, A. Ortiz1, A. Rivera-Rodriguez1, R. Duran1, I. Castro1, J. Watson1, S. Walker1, J. Martinez1, H. Ough1, Community Collaborative Board
1Mount Sinai School of Medicine, Psychiatry, New York, United States, 2Peabody College at Vanderbilt University, Psychology, Psychiatry, and Public Policy, Nashville, United States, 3Columbia University College of Physicians & Surgeons, New York, United States, 4Hebrew University, Jerusalem, Israel

Background: The aim of this study is to examine the impact of a family-based HIV preventative intervention for adults with serious mental health needs who are caregivers of adolescents and who reside in family homeless shelters. Secondary data analyses drawn from a multi-site study funded by the U.S. National Institute on Drug Abuse (RO1DA018574), the Hope (Homeless Outreach to Parents and Early Adolescents) Program, was conducted with a highly vulnerable sample of families enrolled in a series of eight family workshops meant to enhance HIV protective family process, specifically parental monitoring and supervision skills, within family support, parent-child communication, all of which have been previously linked to reduced adolescent sexual and substance use risk taking and po a five youth mental health.

Methods: Data from 204 adult caregivers of pre and early adolescent youth, ages 11 to 14 years, were included in logistic regression analyses. Standardized instruments were used such as the Brief Symptom Inventory, Family Assessment Measure, Strengths and Difficulties Questionnaire and Parenting Stress Index.

Results: Findings revealed that adults with serious mental health needs (n=26) were significantly more likely to attend the family workshops offered and reported significant gains in family functioning (OR = 4.50, 95%CI: 1.00-20.16), improvement in child mental health (OR = 1.36, 95%CI: 0.148-12.66), and parental stress (OR = 3.276, 95%CI: 1.08-9.86) relative to those reporting less needs.

Conclusions: Participation in a family-based HIV prevention program was associated with benefits even for the most vulnerable families residing in urban family homeless shelters. The international literature concerning HIV risk behaviors indicates that men who have sex with men (MSM) engage in riskier sex practices than the general population. Studies show a strong link between increased alcohol consumption and risky sex. However, little research has been conducted exploring these issues in China, where MSM account for 11% of HIV/AIDS cases. Thus, the aim of this study was to explore alcohol and other potential correlates of risky sexual behaviors among Chinese MSM.

Methods: MSM participants (N=404) were recruited through respondent-driven sampling in Shanghai and completed self-administered questionnaires. The current analyses examined demographics, alcohol use and dependence, psychosocial scales, and HIV sexual risk behaviors. A sexual risk index was created from sixteen behaviors found in the literature as being markers for increased HIV risk. Examples of these items include protected and unprotected anal sex, oral sex, and casual sex partners. Additionally, sex with male/female prostitutes was specifically explored.

Results: Over 50% of participants reported a score of 8 or more unsafe behaviors. Higher risk scores were associated with greater amounts of drinking (β = .65, p < .01), increased income (β = .64, p < .001), lower identification with being gay (β = .81, p < .001), and greater attitudes of sexual permisiveness (β = .82, p < .01). Sex with prostitutes was associated with higher drinking (OR = 1.76; 95% CI 1.12-2.81), lower education (OR = 0.57; 95% CI 0.40-0.85), and higher income (OR = 2.89; 95% CI 1.11-7.17).

Conclusions: The high rate of risky sexual behaviors and its association with alcohol use among MSM in China is cause for alarm. Future research and prevention efforts should focus on this relationship and consider specific aspects of gay identification and sexual attitudes that may influence HIV risk among MSM in China.
WEPE0512 Youth substance use in a context of family homelessness coupled with parent mental health and substance abuse difficulties

W. Bannon1, L. Bickman1, M. McCoy1, N. Behar1, O. Olishain-Mann1, L. Goldsman1, A. Paulino1, A. Tawney1, E. Torres,1 A. Miranda1, A. Ortiz1, A. Rivera-Rodriguez1, R. Duran1, I. Castro1, J. Watson1, S. Walker1, J. Martinez1, H. Ouiji1, Community Collaborative Board

1Mount Sinai School of Medicine, Medicine, New York, United States, 2Columbia University College of Physicians & Surgeons, New York, United States, 3Hebrew University, Jerusalem, Israel

Background: Among families residing in homeless shelters, there is a sub-population of more vulnerable families whose heads of household present serious mental needs coupled with substance abuse related disabilities. When adult caregivers face these challenges, parenting and protective family processes may be impaired. This may result in youth having fewer coping skills making them vulnerable to substance abuse, which is a strong correlate to a set of HIV risk taking behaviors. The current study examines the relationship between youth being reared within vulnerable families (serious mental health or substance abuse use challenges; yes/no) on youth substance use.

Methods: A secondary analyses was conducted drawing on baseline data from a large-scale HIV and substance abuse prevention study set within urban family homeless shelters serving largely African American and Latino youth and their families. Data collected via standardized measures from 204 adult caregivers and youth (ages 11-14) were included.

Results: Logistic regression indicated that over the month prior to data collection, youth within these vulnerable families were over three times (OR=3.53, 95% CI=1.12-11.15) more likely to have used alcohol (OR=1.26; X²(1, N = 200)=4.61, p < .05), four times (OR=4.41; 95% CI=9.19-68.68) more likely to have used marijuana (OR=1.48; X²(1, N = 200)=3.78, p < .05), and eleven times (OR=11.22, 95% CI=1.87-70.73) more likely to have combined alcohol and marijuana use (OR=2.42; X²(1, N = 200)=6.62, p < .01), relative to youth within less vulnerable families. Youth demographic characteristics were included in the multivariate models. No differences by demographic characteristics (race, ethnicity, gender of youth) were detected.

Conclusions: The findings support prevention programs designed for youth within stressful contextual circumstances should consider whether adult mental health and substance abuse service delivery integration may contribute to decreasing HIV risk exposure for highly vulnerable youth.

Acknowledgements: This project is supported by US National Institute on Drug Abuse (RO1 DA18974).

Presenting author email: mary.mckay@msm.edu

WEPE0513 Street homelessness and stimulant use disorders are independently associated with HAART utilization among HIV-infected indigent adults

E. Bilgo1, S. Weiser1, M. Charter2, A. Carnic1

1University of California, Medicine, San Francisco, United States, 2San Francisco Veterans Affairs Medical Center, San Francisco, United States

Background: Utilization of highly active antiretroviral therapy (HAART) is the primary predictor of survival among HIV-infected individuals (HIV-I). We examined demographic and psychiatric correlates of HAART utilization in this population.

Methods: From 2004 - 2006, 313 HIV-infected adults recruited from free meal programs, homeless shelters and low-income hotels were interviewed; blood drawn, assessed for CD+ count and studying blood for infections. The outcome of interest was current HAART utilization among eligible persons. Eligibility was defined as currently taking HAART or not taking HAART with T-helper (CD+4) count ≤ 250. The diagnostic interview schedule (DIS) was also administered to screen for mental health, alcohol and substance use disorders.

Results: Among the 197 eligible participants included in this analysis, 31% were women, 58% were of non-white race/ethnicity, and 24% had used stimulants (i.e., cocaine, crack, or speed) in the prior 30 days. One-fourth (23%) of participants were not currently taking HAART despite having a CD4+ count ≤250. According to DIS results, 17% and 15% of participants screened positive for current PTSD and any current severe mental illness respectively. In a multiple logistic regression analysis that included ether demographic and psychiatric variables, sleeping on the street (OR=0.03; CI=0.01-0.22) and screening positive for a stimulant use disorder (OR=0.32; CI=0.13-0.79) were independently associated with HAART utilization.

Conclusions: Among San Francisco’s HIV-infected indigent adults that are eligible for HAART, one in four are not currently utilizing HAART. These data suggest that, in a resource-rich environment, structural (i.e., housing and psychiatric (i.e., stimulant use disorders) factors are the principle barriers to accessing and utilizing treatment among indigent adults.

Presenting author email: enley@epi-center.ucsf.edu

WEPE0514 Effectiveness of the behavioural self-control training KISS with drug addicts: paradigm shift in harm reduction treatment

J. Koerkel1, G. Becker1, V. Happe1, G. Lipsmeier1, C. Straub1

1University of Applied Sciences Nuremberg, School of Social Work, Nuremberg, Germany, 2Integrative Drogenhilfe (IDH), Frankfurt, Germany, 3University of Applied Sciences Frankfurt, PB 4; Social Work and Health, Frankfurt, Germany, 4GK Quest Academy, Heidelberg, Germany

Background: In Germany harm reduction approaches (like needle exchange or safer use programs, safe injection rooms etc.) have developed in sharp contrast to the abstinance-based treatment system (like drug rehab). In the harm reduction paradigm drug consumption is accepted as part of the life style of the drug user and motivational or behavioral interventions are regarded as intrusive intending to seduce the subject to do something that is not in his or her own interest (namely to live totally abstinent from drugs). But from the viewpoint of Motivational Interviewing (MI: Miller & Rollnick, 2002) drug addicts have an intrinsic interest to change the negative consequences of their drug intake. From this perspective we trained street drug addicts who didn’t want to live drug-free were offered to participate in the Behavioral Self-Control Training (BSCt) KISS to systematically reduce their consumption of illegal and legal drugs. The effectiveness of KISS was tested in a Randomized Controlled Trial.

Methods: 113 intravenous polydrug addics were randomly assigned to one of 10 KISS groups (with 12 sessions) or one of 10 Waiting List (WL) control groups. Ss: age 39 years, 28% women, 73% unemployed, > 48% homeless, 64% HCV, 16% HIV, 5.23 drugs consumed on average (last month). Ss underwent pre-, post-, and six month follow-up-assessment (including Timeline-Followback for all substances and DSM-IV substance diagnoses).

Results: KISS participants show significantly (p < .05) greater reduction in total drug intake and money spent for drugs and an increase in abstinence days, compared to WL controls. Effect sizes are low to high. The most impressive improvements are detected for crack cocaine, benzo diazepines, and heroin.

Conclusions: KISS, i.e. BSCt for controlled drug consumption, should be considered as treatment option for severely dependent drug addicts not able or willing to live abstinence.

Presenting author email: joachim.koerkel@evhr-nuremberg.de

WEPE0515 Synergetic effects of psychosocial and substance use problems on increased sexual transmission risk among HIV-infected men who have sex with men

C. O’Clair1, M. Mimiga3, S. A. Saltco1, R. Stall1, K.H. Mayer1

1The Fenway Institute, Fenway Community Health, Boston, United States, 2Harvard Medical School / Massachusetts General Hospital, Boston, United States, 3University of Pittsburgh Graduate School of Public Health, Pittsburgh, United States, 4Brown Medical School, Providence, United States

Background: Among HIV-infected MSM, negative affect (e.g., anxiety/depression) and maladaptive attempts to cope with negative affect (e.g., substance/alcohol use) are associated with sexual transmission risk behaviors (TRB). These mental health and substance use issues can co-occur at high rates and may interact to increase the TRB of HIV-infected men who have sex with men (MSM). The current study hypothesized that the combined effects of six syndemic indicators (childhood sexual abuse, posttraumatic stress disorder(PTSD), anxiety disorders, depression, polysubstance use, alcohol abuse) would increase the likelihood of TRB among HIV-infected MSM.

Methods: 380 HIV-infected MSM who reported unprotected anal intercourse in the past 3 months completed psychosocial, substance use, and sexual risk assessments. One syndemic variable was generated identifying for how many of six indicators each participant met diagnostic screen-in criteria. This variable was categorized to reflect three syndemic levels (no indicators; 1-3 indicators; ≥ 4 indicators). Binary logistic regression was used to analyze the relationship between TRB (sex-oriented unprotected anal intercourse in the past 3 months).

Results: The rates at which the 380 participants met criteria for each of the indicators were childhood sexual abuse history-45%, anxiety disorders-32.6%, polysubstance use-27.9%, PTSD-27.9%, alcohol abuse-20.8%, and depression-13.6%. Twenty percent did not meet criteria for any syndemic indicator. The syndemics variable was associated with a significantly higher likelihood of TRB. For those with 1-3 indicators there was a greater than two-fold increase in the likelihood of TRB (Odds Ratio: 2.31 ; 95% CI: 1.61 - 4.58; p < .01) and for those with ≥ 4 indicators there was a four fold increase (Odds Ratio: 4.17 ; 95% CI: 2.04 - 8.55; p < .01). In the absence of any indicators.

Conclusions: Interrelated psychosocial problems co-occur at very high rates among HIV-infected MSM. The syndemic co-occurrence of these problems is associated with dramatic elevations in TRB. Secondary prevention interventions that also address psychosocial problems may reap additional benefit.

Presenting author email: cocleirigh@partners.org
Sexual orientation differences in the illicit use of PDE5 inhibitors

Sexual orientation differences in the illicit use of PDE5 inhibitors

S.D. Cochran1, V.M. Mays2
1S.D. Cochran: School of Public Health, Epidemiology, Los Angeles, United States, 2V.M. Mays: University of California Los Angeles, Psychology, Los Angeles, United States

Background: PDE5 inhibitors, marketed under trade names including Viagra, Levitra, and Cialis, are widely used for the treatment of erectile dysfunction. Recent studies have documented high rates of recreational PDE5 inhibitor use among gay and bisexual men (GB), particularly HIV infected men. However, these surveys generally drew nonrepresentative samples of GB men from social venues and lacked heterosexual comparison groups. Actual use rates in the population as a whole may be much lower. We investigate recreational PDE5 inhibitor use in a representative sample of California men who vary in sexual orientation.

Methods: The Cal-QOL II survey drew a population-based sample of Californians, age 18 to 72 years, including 1,367 men (971 heterosexual; 396 GB-identified). All were administered a structured interview assessing sexual orientation identity, sexual behavior, recreational PDE5 inhibitor and other illicit drug use, and self-reported HIV status. Multivariate logistic regression methods were used to investigate correlates of PDE5 inhibitor use while adjusting for demographic confounding.

Results: Past year recreational PDE5 use was relatively rarely reported, though significantly more frequently by GB men (4.3%) than heterosexual men (1.2%). Among men with self-reported HIV infection (0.4% of the sample, n=60), 9.9% reported illicit PDE5 inhibitor use.

Conclusions: Recent surveys reporting that more than 1/4 of MSM’s recreationally use PDE5 inhibitors may have overestimated their use in the GB population focusing on younger, more sexually active samples, often drawn from gay social venues. Our results suggest a much lower use rate in the general GB population, though still more frequent than that seen among heterosexual men. As with other studies, we observed that HIV-infected men were much more likely to report illicit PDE5 inhibitor use than other men, underscoring concerns about the role of illicit PDE5 inhibitor use in possible HIV transmission.

Presenting author email: cochrans@ucla.edu

Methamphetamine injection and HIV risk behaviour among a community-recruited sample of injection drug users in Bangkok, Thailand

Methamphetamine injection and HIV risk behaviour among a community-recruited sample of injection drug users in Bangkok, Thailand

K. Hayashi1, N. Fairbairn1, K. Kaplan2, P. Suwannawong3, J. Qi2, E. Wood4, T. Kerr5
1K. Hayashi: British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada, 2K. Kaplan: University of British Columbia, Faculty of Medicine, Vancouver, Canada, 3P. Suwannawong: University of California Los Angeles, Psychology, Los Angeles, United States, 4E. Wood: University of British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada, 5T. Kerr: Thai AIDS Treatment Action Group (TTAG), Policy and Development, Bangkok, Thailand, 6Urban Health Research Initiative, British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada

Background: Methamphetamine use is a major public health problem and appears to be related to low uptake of HCV testing among this population. While previous research has focused primarily on non-injection use of methamphetamine, little is known about injection use. Therefore, we sought to examine the prevalence of and harms associated with methamphetamine injection among Thai people who inject drugs (IDU). We also sought to examine whether injection was linked to increased risk of HIV and HCV transmission.

Methods: Using univariate statistics and multivariate logistic regression, we examined the prevalence and correlates of frequent methamphetamine injection among Thai IDU participating in the Mitsampan Community Research Project (Bangkok, Thailand).

Results: In total, 311 IDU participated in this study between June and August 2009; 91 (29.3%) were female and the median age was 36.0 years. In total, 114 (36.7%) participants reported having injected yaba more than once a week during the previous six months. In multivariate analyses, weekly methamphetamine injection was associated with female gender (Adjusted Odds Ratio [AOR] = 1.88; 95% Confidence Interval [CI]: 1.08 - 3.25), yaba sharing (AOR = 2.81; 95% CI: 1.55 - 5.00), weekly heroin injection (AOR = 1.92; 95% CI: 1.07 - 3.47), a reported history of being sold or given drugs by others (AOR = 2.62; 95% CI: 1.13 - 5.97), and was negatively associated with regularly seeing an HIV doctor (AOR = 0.25; 95% CI: 0.07 - 0.91).

Conclusions: Over one-third of a community-recruited sample of Thai IDU reported frequent methamphetamine injection. Importantly, frequent methamphetamine injection was independently associated with yaba sharing, polysubstance use, and adverse interactions with police. Our findings indicate that frequent methamphetamine injectors are at heightened risk of HIV infection and other harms. Essential HIV prevention efforts must be targeted to this high-risk group, including interventions that address methamphetamine use.

WEPE0517

Drug and alcohol related risk behaviour

Low uptake of hepatitis C (HCV) testing and high prevalence of HCV risk behavior among HIV-positive injection drug users in Bangkok, Thailand

Low uptake of hepatitis C (HCV) testing and high prevalence of HCV risk behavior among HIV-positive injection drug users in Bangkok, Thailand

K. Hayashi1, N. Fairbairn1, P. Suwannawong3, J. Qi2, E. Wood1, T. Kerr5
1K. Hayashi: Thai AIDS Treatment Action Group (TTAG), Policy and Development, Bangkok, Thailand, 2Urban Health Research Initiative, British Columbia Centre for Excellence in HIV/AIDS, Vancouver, Canada, 3Thai AIDS Treatment Action Group, Bangkok, Thailand, 4University of British Columbia, Department of Medicine, Vancouver, Canada

Background: Less than 1% of people who inject drugs in Thailand have access to harm reduction services including syringe distribution, and approximately 50% are living with HIV. No national data for hepatitis C (HCV) infection among injecting drug users (IDU) exists, but >90% are estimated to be HCV-infected. HIV/HCV core-infection threatens to undermine efficacy of antiretroviral therapy (ART) and increase mortality in IDU, due to risks related to ART-associated liver toxicity.

Methods: Using univariate statistics and multivariate logistic regression we examined the prevalence and correlates of HCV testing among HIV-positive Thai IDU participating in the Mitsampan Community Research Project (Bangkok, Thailand).

Results: In total, 67 HIV-positive IDU enrolled in this study between June and August 2009; 14 (20.9%) were female and the median age was 37.0 years. In total, 35 (52.2%) participants reported a history of HCV testing, and 34 (50.7%) did not know they were HCV seropositive. Primary reasons for not testing for HCV included “never heard of HCV” (65.5%) and “not aware of HCV risks” (37.5%). Among HIV-positive IDU who did not know their HCV serostatus, 38.2% reported sharing syringes in the past six months. In multivariate analyses, unknown HCV serostatus was associated with methamphetamine injection (Adjusted Odds Ratio [AOR] = 4.57; 95% Confidence Interval [CI]: 1.02 - 20.43), frequently injected with others (AOR = 3.98; 95% CI: 1.24 - 12.78), and was negatively associated with regularly seeing an HIV doctor (AOR = 0.25; 95% CI: 0.07 - 0.91).

Conclusions: We found high rates of HCV risk behavior among Thai IDU living with HIV, as well as a lack of awareness of HCV among this population, which appears to be related to low uptake of HCV testing among this population. These findings suggest that Thailand must urgently promote HIV awareness and access to HCV prevention tools and diagnostics for HIV-positive IDU.

Presenting author email: karyn.kaplan@gmail.com

Search for a causative link between sex under the influence and the influence of drugs or alcohol and sexual risk behavior

Search for a causative link between sex under the influence and the influence of drugs or alcohol and sexual risk behavior

D. Calvino1, H. Baldwin2, X. Niu1, P. Crites-Christoph2, M. Hatch-Maitlleet
1University of Washington, Alcohol & Drug Abuse Institute/Psychiatry & Behavioral Sciences, Seattle, United States, 2University of Washington, School of Public Health, Seattle, United States, 3University of Washington, Department of Statistics, Seattle, United States, 4University of California Los Angeles, Psychology, Los Angeles, United States, 5University of Washington, Alcohol and Drug Abuse Institute/Department of Psychiatry & Behavioral Sciences, Seattle, United States

Background: Studies have observed that sex under the influence of drugs or alcohol is associated with increase in sexual risk behavior. However, it is not clear whether there is causative link between the influence of drugs or alcohol and sexual risk behavior or whether the relationship is simply correlative. The objective of the current analysis was to determine if there is evidence for a causative link between sex under the influence and risky sex in a sample of men in substance abuse treatment. Methods: Of 537 heterosexual men in substance abuse treatment participating in a multi-site HIV prevention protocol, 237 reported on baseline, 3 and 6-month computerized assessments the details of their most recent sexual event. Of these, 37 reported both sex under the influence and not under the influence most recent events, and reported most recent events that did and did not include condom use. The data analysis focused on these 37 participants and can be viewed as an example of matched case-control studies (Breslow et al., 1978; Breslow and Day, 1980). In order to eliminate as many as possible confounding factors, a within-person conditional analysis was performed. We denoted y=1 as sex under the influence, y=0 as safe sex. In order to eliminate person effects, a conditional logistic model on individual conditional probabilities was built.

Results: The value obtained from the model for β (log odds ratio of safe sex under influence and safe sex under no influence) was 0.18 (p=0.2). Safe sex was not significantly more likely to happen when participants were under the influence during their most recent sexual event (48.3%) than when they were not under the influence (49%).

Conclusions: In this high-risk sample, a causative link could not be established between sex under the influence of drugs or alcohol and sexual risk behavior.

Presenting author email: calvino@u.washington.edu
WEPE0520
Sex - drug use and HIV transmitting behavior among MSM: 25 years of research in the multicenter AIDS cohort study (MACS)

D.G. Ostrow,1 M.W. Paranik,2 S.R. Cole,3 R.C. Stall4 The MACS Behavioral Working Group
1NorC at the University of Chicago, Ogbum-Strouffer Center for Social Organization Research, Chicago, United States, 2David Ostrow & Associates, Chicago, United States, 3Georgetown University Medical Center, Medicine, Washington, United States, 4Gillings School of Global Public Health, University of No Carolina, Epidemiology, Chapel Hill, United States, 5University of Pittsburgh, Graduate School of Public Health, Pittsburgh, United States

Issues: Despite 25 years of research on the role(s) of non-intravenous drug use in HIV transmission among MSM, there is little agreement on the mechanisms by which drugs and alcohol facilitate HIV transmission and how to prevent new infections related to drug use.

Description: This presentation will review the history of research on sex-drug use and its impact on HIV seroconversion among MSM over the past 25 years of the MACS. Recent breakthroughs that promise effective intervention potential for sex-drug use will be highlighted, along with an integrated model for effective HIV Prevention among drug-sex using MSM. Recent studies using innovative methods, such as residual path analysis and attributional analyses will be emphasized.

Lessons learned: Since 1984, the MACS has followed thousands of HIV-negative and positive MSM across the US. Among its major behavioral findings is that specific drugs (aka “sex-drugs”) such as stimulants, poppers and EDIDs are associated with the majority of new HIV seroconversions over the last 10 years. Mechanistically, this includes behavioral disinhibition but also selection for high risk partners, traumatic sexual practices and specific attitudes, beliefs and personality traits that predispose sex-drug users to engage in risky sexual and drug use behaviors. In contrast, alcohol use appears to increase the likelihood of HIV infection in a dose-related but non-specific fashion. An integrated model that combines early life traumas and resulting individual vulnerabilities with the putative biological and behavioral effects of adult drug and alcohol use in the promotion of HIV transmission through unprotected anal intercourse will be described.

Next steps: Sex-drug and alcohol use and their associated vulnerabilities continue to drive increasing rates of HIV infection among vulnerable MSM. Drug and alcohol use among MSM needs to be confronted directly to effectively prevent increased rates of HIV infection in this population. 

Presenting author email: dostrow@uchicago.edu

WEPE0522
Effective treatment options for injecting drug users: what is needed and why? Findings from the Edinburgh addiction cohort case/control study

J.R. Robertson,1 M. Hickman,2 J. Macled3, J. Kimber,4 L. Copeland1, J. McKinnon1, D. deAngelis1 1Edinburgh University, Community Health Sciences, Edinburgh, United Kingdom, 2University of Bristol, Social Medicine, Bristol, United Kingdom, 3University of New South Wales, National Centre in HIV Epidemiology, Sydney, Australia, 4Muirhouse Medical Centre, Edinburgh, United Kingdom, 5NRC Biostatistics Unit, Institute of Public Health, Cambridge, United Kingdom

Background: Injecting drug use is recognised as an important route of introduction of HIV infection and driver of heterosexual transmission in many countries. Hepatitis C has galvanised the debate about the efficacy of harm reduction measures to prevent equipment sharing and virus transmission. The use of Opiate Substitution Treatments (OST) such as methadone and buprenorphine remain the only evidence-based measure to prevent transmission of blood borne viruses. Clearly, better understanding of the causes and life history of injecting drug use is essential in order to design, implement and maintain effective treatment programmes.

Methods: A case/control study was conducted over 4 years. The first stage followed up a cohort of injecting drug users who had been recruited via a primary care facility in Edinburgh, UK. The second stage recruited a non-injecting, age/sex matched control from the same location. Information was compiled on childhood experiences, illicit drug use and substitution treatment, social, medical and criminal histories. The same interview schedule, along with a primary care record search, validated health, alcohol and smoking questionnaires, was used with both groups.

Results: Four hundred and thirty two cases and controls were interviewed. Comparisons of early life experiences demonstrated significantly increased adverse experiences in the cases, including parental alcohol and drug problems, death of parents, family dysfunction, social work and criminal justice involvement. For cases, long term drug injecting was recorded for patients on OST. Results showed that there was significant protection against death for injecting who had experienced OST. Transmission of HIV infection had disappeared in the cohort and Hepatitis C transmission was declining.

Conclusions: Opiate substitution treatment is critically important in engaging drug injectors, reducing transmission of blood borne viruses and preventing death from overdose and other factors. Early life damage and lifelong dependency on drugs means that treatment options may also need to be long term.

Presenting author email: jsm08@hotmail.com

WEPE0521
Young people living on the street: a challenge for health prevention

S.M. Santos Oliveira1, T. Tampieri Lima2 1Programa Municipal de DST/AIDS do Municipio de Sao Paulo - Secretaria de Saude, CTA Henfi, Sao Paulo, Brazil, 2Programa Municipal de DST/AIDS do Municipio de Sao Paulo - Secretaria de Saude, Sao Paulo, Brazil

Issues: The exposure of youth to HIV is the result of a number of individual, collective and contextual factors. The exclusion of young people among the poorest of the population leads to higher susceptibility to infection and reduced availability of resources for their protection.

Description: A project was created by the government and three NGOs. It constituted a working group to develop, track and monitor actions of prevention against STD/AIDS. It was followed by CTA Henfi - a public health center providing STD/AIDS prevention - and by the NGOs, following three aspects:

ENSURING RIGHTS: Training health professionals, social workers and art educators, to talk about such topics as sexuality, STD/AIDS prevention and Health Public Policy.

ART-EDUCATION Workshops with children, teenagers and young people - *capoeira*, photography, sexuality & prevention and movies.

QUIXOTE AT THE STREET Workshops with children and teenagers on the street: Hip Hop, Rap, Break, Graffis, Taxi video making and playful games.

Lessons learned: Art education workshops increased access to condoms, STD/AIDS testing for youth on the streets.

Listening about the conditions of social and affective life has helped us to ponder about and to find new ways to make viable prevention actions, through their values and living conditions, enabling youth to make and to remake their own choices according to their ideals.

Next steps: To transform these actions in the policy guidelines for the STD/ AIDS prevention; To create alternatives for social inclusion of the youth at social risk, in Sao Paulo town center, strengthening support networks for young people and their families.

To contribute with the reduction of the vulnerabilities of youth in social risk of STD/AIDS.

To promote the artistic and cultural expressions of theirs, and to plan health promotion and prevention among them.

Presenting author email: ctahenfi@prefeitura.sp.gov.br

WEPE0523
Substance use as a mediating mechanism between self-mutilation and HIV risk behavior among adolescent females receiving mental health services

B. Lang1, L. Salazar1, R. Crosby1, R. DiClemente1, L. Brown1, G. Donenberg1 1Emory University, Rollins School of Public Health, Atlanta, United States, 2University of Kentucky, College of Public Health, Louisville, United States, 3Brown University, Providence, United States, 4University of Illinois at Chicago, Chicago, United States

Background: Cutting is a frequent self-mutilating behavior observed among female adolescents. Studies have identified a link between cutting and sexual risk-taking although the mechanism that explains this association is unclear. The current study sought to determine: 1) the prevalence of cutting behavior; 2) associations between cutting and sexual risk behaviors; and 3) the association between cutting and biologically confirmed sexually transmitted infections (STIs).

Methods: 498 adolescent females between the ages of 13 and 18 were recruited in three urban cities in the United States and completed an in-depth computer administered interview. Participants were clinically diagnosed with a psychiatric disorder at time of enrollment. Cutting behavior was reported by 38.2% of females; 33.3% reported using alcohol and/or marijuana in the past 30 days; 58.7% were sexually active and 12.3% tested positive for one of three commonly occurring STIs (Chlamydia, Gonorrhea, Trichomoniasis). Using Baron and Kenny’s criteria for mediation, cutting had a significant direct effect on four HIV risk outcomes: testing positive for an STI, engaging in vaginal sex, having casual sex partners, and inconsistent condom use; cutting also had a significant direct effect on substance use. Finally, controlling for age, there were significant indirect effects of cutting behavior on all aforementioned risk outcomes through substance use, thus substantiating a mediation model for each of the risk outcomes.

Conclusions: Cutting was found to be prevalent in this sample of adolescent females receiving psychiatric services. The relation between cutting and sexual risk outcomes was explained by the use of alcohol and/or marijuana. Consequently, in addition to addressing the underlying psychological processes contributing to cutting behaviors, clinicians are advised to assess and treat substance use disorders when working with female adolescents in an attempt to lessen HIV risk-taking behaviors.

Presenting author email: dlang2@sphs.emory.edu
WEPE0525
Patterns of change over time in stimulant drug use in the multicenter AIDS cohort study (MACS)
S. Shoptaw3, J. Chmiel4, M. Plankey5
1University of North Carolina School of Public Health, Chapel Hill, United States, 2Ostrow and Associates, Chicago, United States, 3University of California, Los Angeles, United States, 4Northwestern University, Chicago, United States, 5Georgetown University, Washington, United States

Background: Stimulant drug use, including methamphetamine use, is a predictor of HIV seroconversion among men who have sex with men (MSM). Investigating whether stimulant drug use patterns change in tandem with HIV sexual risk-taking could improve prevention practice.

Methods: We analyzed changes in stimulant drug use and sexual risk-taking (numbers of unprotected insertive and receptive anal sex partners) from early 2003 through 2007 among men who participated in the MACS (N=2345; 8 semi-annual waves of data collection). Stimulant drug use was defined as use of crack cocaine, other forms of cocaine, methamphetamine and MDMA. A distinct permissive model was introduced to assess the sexual risk-change over time and a semi-parametric growth curve model was used to examine the association of drug use patterns with high risk sex.

Results: Four distinct patterns of stimulant drug use were identified: consistent frequent use (9.5% of the cohort); increase from infrequent to frequent over time (5.8%), decrease from frequent to infrequent (8.8%) and a group of abstinent/rare users (75.9%). Men who decreased stimulant drug use over time also reduced their number of unprotected receptive anal sex partners (UARI); men who increased use reported increases in UARI partners (all p's < .01).

Conclusions: Even during a stimulant drug use epidemic among MSM, the vast majority of men in the MACS reported no or declining use over time. Stimulant drug use and sexual risk patterns changed in tandem over time, underscoring how MSM reduce both stimulant use and HIV sexual risk behavior as they mature. These findings may yield important insights to guide HIV and drug abuse prevention efforts.

Presenting author email: rsta@pitt.edu

WEPE0526
HIV risk behaviors among young male injecting drug users in Dar es Salaam, Tanzania
T. Yamani1, S. Maman1, L. Kajuri1, J. Mwambombo1
1Duke University Medical Center, Global Health Institute, Durham, United States, 2Muhimbili University of Health and Allied Sciences, Psychiatry, Dar es Salaam, Tanzania, United Republic of Tanzania

Background: Injection drug use (IDU) has been reported in urban regions of sub-Saharan Africa. These studies have mostly concentrated on adult IDU. We examine characteristics and HIV risk behaviors of young men who reported IDU in Dar es Salaam.

Methods: The study was conducted in Tandale ward, a geographic area where adult IDUs were previously identified (McCurdy et al, 2006). Community informants identified 83 venues where young men socialized. In 67 randomly selected venues we interviewed 671 men ages 15 to 19 about their sexual behavior, sexual debut, multiple sex partners, and sexual violence, all of which lead to increased frequency of sexual substance use. Risk measurement strategies included self-report items to behavioral checklists of unprotected anal intercourse (UAI), to more complex calculations of serodiscordant unprotected anal sex (UDUIA), which may not measure frequency of risk. Inherent UAI may not pose a significant risk, whereas, an increased frequency of UAI (regardless of partner serostatus) may be high risk for HIV/STIs. The current study sought to contrast measurement tools between UAI and UDUIA outcomes on sexual substance use in the same sample of MSM.

Results: Two multiple regression analyses were conducted upon the same dependent variable, a composite measure of substance use disorders (SUD) that included past year of drug use, drinking, smoking and injection. Significant predictors of increased frequency of sexual substance use was self-reported IDU in the past six months. Three months of sexual risk functioned as independent variables; 1) dichotomous UDUIA and 2) frequency of UAI. Other independent variables included HIV status, gay/bisexual identity, education, race, STI history, history of childhood sexual abuse (CSA) and disordered eating risk (DES).

Results: Differential analysis determined that risk measurement significantly impacted results. The more conservative UDUIA model found that being non-White, bisexual and having CSA history were associated with increased frequency of sexual substance use while the UAI model added HIV-positivity, and total UAI as predictors of increased frequency of sexual substance use.

Conclusions: Frequency of UAI, UDUIA, and UDUIA are all positively associated with increased frequency of sexual substance use. Risk measurement strategies must be specific in order to avoid over or underestimating the potential for interventions to reduce HIV/STI risk among MSM, particularly those who are HIV-positive.

Presenting author email: david.brennan@utoronto.ca

WEPE0527
Emerging programmatic approaches to preventing alcohol-related sexual risk
K. Fritz1, R. Trau2
1International Center for Research on Women, Gender & HIV, Washington DC, United States

Issues: Research conducted in developing countries demonstrates that drinking settings for women are often sexualized, and drinking behaviors are associated with HIV. Addressing alcohol use in conjunction with HIV prevention interventions may have the potential to reduce HIV transmission more quickly than conventional prevention programs alone.

Description: In countries battling severe HIV epidemics, three approaches have been used to address alcohol and risky sex:
1) curriculum-based prevention for youth,
2) brief individual counseling, and
3) peer-led bar-based interventions.

ADSTAR-One undertook a comparative analysis of the strengths and challenges of three programs that exemplify each approach. In South Africa, we examined the HIV and Alcohol Prevention in Schools Project and the Phapha Project for STI patients. In India, we examined an alcohol and HIV prevention program developed for wine bar patrons. Lessons learned: Evaluations show that short-term effects are achievable from both the curriculum-based programs for youth and the brief counseling for STI patients. Curriculum-based programs appear more promising for less developed countries, knowledge and attitudes just as their patterns of behavior around alcohol use and sexual behavior are established. Unfortunately, in many developing countries, secondary school attendance is uncommon, limiting the benefits of this intervention. Brief counseling requires skilled intervention staff and is labor intensive. It may be most appropriate when targeted at most-at-risk populations. Bar-based programs represent a crucial opportunity to intervene. However currently, there is limited evidence that the bar-based, peer-led approach is effective in settings other than gay bars in the United States. More research is needed to show whether this model can be successfully adapted for other settings.

Next steps: Existing program strategies can be adapted and scaled-up, but impact needs to be strengthened and sustained over time. Additional strategies should be developed to ensure a supportive social and policy environment where youth are crucial to sustaining reductions in alcohol-related HIV risk.

Presenting author email: kfritz@icrw.org

WEPE0528
Comparison of different measurements of sexual risk in relation to use of sex drugs among MSM
D.J. Brennan1, S.L. Craig2
1University of Toronto, Faculty of Social Work, Toronto, Canada
2Concordia University, Montreal, Canada

Background: Inconsistent measurement of sexual risk among men who have sex with men (MSM) can have profound implications for HIV/STI research and interventions. Measures range from single self-report items to behavioral checklists of unprotected anal intercourse (UAI), to more complex calculations of serodiscordant unprotected anal sex (UDUIA), which may not measure frequency of risk. Inherent UAI may not pose a significant risk, whereas, an increased frequency of UAI (regardless of partner serostatus) may be high risk for HIV/STIs. The current study sought to contrast measurement tools between UAI and UDUIA outcomes on sexual substance use in the same sample of MSM.

Methods: Cross-sectional data were gathered from racially diverse MSM attending the Pride Toronto 2008 Festival (n=510). Eligibility included being at least 16, male, and one same-sexual incident during the past 6 months. Two multiple regression analyses were conducted upon the same dependent variable, a composite measure of substance use disorders (SUD) that included past year of drug use, drinking, smoking and injection. Significant predictors of increased frequency of sexual substance use was self-reported IDU in the past six months. Three months of sexual risk functioned as independent variables; 1) dichotomous UDUIA and 2) frequency of UAI. Other independent variables included HIV status, gay/bisexual identity, education, race, STI history, history of childhood sexual abuse (CSA) and disordered eating risk (DES).

Results: Differential analysis determined that risk measurement significantly impacted results. The more conservative UDUIA model found that being non-White, bisexual and having CSA history were associated with increased frequency of sexual substance use while the UAI model added HIV-positivity, and total UAI as predictors of increased frequency of sexual substance use.

Conclusions: Frequency of UAI, UDUIA, and UDUIA are all positively associated with increased frequency of sexual substance use. Risk measurement strategies must be specific in order to avoid over or underestimating the potential for interventions to reduce HIV/STI risk among MSM, particularly those who are HIV-positive.

Presenting author email: david.brennan@utoronto.ca

WEPE0529
The intersection of alcohol dis inhibition and HIV exposure: effects on girls vulnerability in Botswana, Malawi, and Mozambique
C. Underwood1, R. Limaye2
1Johns Hopkins Bloomberg School of Public Health, Health, Behavior & Society, Baltimore, United States, 2Johns Hopkins University Bloomberg School of Public Health, Health, Behavior & Society, Baltimore, United States

Background: Consumption of alcohol is a key determinant of sexual risk behavior, and indirectly, a contributor to HIV transmission in sub-Saharan African countries. Studies show that alcohol use is associated with unprotected sex, sexual debut, multiple sex partners, and sexual violence, all of which lead to increased HIV risk exposure. Girls are particularly vulnerable in this equation because of their unregulated access to alcohol and economic dependency on men in regards to transactional sex.

Methods: A qualitative study conducted in 2008 relied on 12 focus group discussions (FGDs) in Botswana, 12 in Malawi, and 11 in Mozambique, divided between urban and rural sites and grouped as follows: adolescent girls (ages 10-14; 15-19), adolescent boys (14-19), adult women (20-49), adult men (20-49), and community leaders. In addition, a FGD (2009) from the Malawi BRIDGE project (girls ages 15-24) was used in the analysis.

Results: Places considered ‘unsafe’ by young girls were ubiquitous at the community level. Venues where alcohol is sold are identified as the most high-risk places for adolescent girls in all communities. Community regulations regarding production, purchasing, consumption, and enforcement surrounding such sites appear non-existent. Alcohol disinhibition is a factor that is crucial to sustaining reductions in alcohol-related HIV risk. Girls are particularly vulnerable in this equation because of their unregulated access to alcohol and economic dependency on men in regards to transactional sex.

Lessons learned: Community regulation needs to be strengthened and sustained over time. Additional strategies should be developed to ensure a supportive social and policy environment where youth are crucial to sustaining reductions in alcohol-related HIV risk.

Presenting author email: kfritz@icrw.org

Wednesday 21 July
Poster Exhibition
Thursday 22 July
Late Breaker Posters
Friday 23 July
Author Index
Conclusions: The findings point to the severity of adverse consequences that affect young women in regards to discrimination from alcohol consumption. These findings suggest interventions at a structural level to better protect girls and enforce legal rules relating to alcohol production and consumption. As many families are involved in consumption, future programs should assist in reducing girls’ vulnerability by providing viable economic opportunities for girls and their families.

Presenting author email: cunderwo@huccp.org

WEPE0530

Networking to reduce the damage of alcoholism, drugs and HIV/AIDS among the poorest youth in Buenos Aires, Argentina

F.C. Salgues1, A.E. Blanco1, L.C. Anchava2

1Centro de Salud ‘Alberto Barton’, 2Municipal de Tres de Febrero, Caseros, Argentina

Issues: The objective of this project is promoting the network among NGOs (CADA), health and education areas, to reduce the damage caused by alcoholism, drugs and vih-sida among poorest young people living in the Contunbano Bonarense area (area of high poverty surrounding the Centre of Buenos Aires).

Description: Buenos Aires is the most population city in Argentina surrounded by three bands or cords of extreme poverty. Our target population were teenagers from 13 to 17, all coming from primary and secondary schools who have serious troubles with abuse of alcohol, other addictive substances, violence and sexual activity without protection from STD and AIDS.

In these schools, professors made sub-projects, articulating activities inter-disciplinary with other peers and using techniques proposed by CADA in Training-kit that included: “Alcohol, drugs and vih-sida ‘conscience for needs of argentine youth’ activities to promote adolescent health”.

Adolescents decided participate in: plastic arts, multimedia, radio, music, photography, murals in their neighborhoods, football championships, and Rock’n Roll Concerts in some schools. These activities are an additional tool to increase the social influence of peers, promote positive behaviors, offer activities and opportunities that give youth reasons to expect a decent future and promote the capacity for participation and self-determination.

CADA provided material resources and technical support. Impact evaluation.

Schools: 132

Adolescents: 23,506

Teachers trained: 420

Lessons learned: School based programs have the potential to reach large numbers of youth and have a well-established organizational structure and niche in the community.

The successful programs in reality treat children and youth holistically, start young, offer many enrichment, growth and development activities, and stick with youth for a long period of time.

Next steps: Work with youth for years, and holistically and comprehensively address the needs and aspirations of youth, including those of their families, peers and neighborhoods to reduce youth behaviors.

Presenting author email: patrisalguero_@hotmail.com

WEPE0531

With meaningful involvement and empowerment of IDUs, the preventive intervention programs becomes more sustainable

D.C. Rimunchung

Care Foundation, Imphal, India

Issues: Although harm reduction approach in Manipur has tremendously scaled up, there is still lack of meaningful involvement of drug users in the overall program planning and implementation, often leading to serious gaps in the intervention.

Description: Care Foundation, an ex-drug user organization, has been implementing harm reduction preventive interventions amongst IDUs (injecting drug users) in the district of Bishnupur since 2004, with the funding from Bill & Melinda Gates Foundation, USA.

The main project activities include needle-syringe exchange program, outreach, peer education, counseling, STI treatment, abstinence & overdose management, capacity building, enabling environment, demand reduction, sensitization, community mobilization and general community advocacy. IDUs are making a new sense of ownership to improve suiting of services currently availing the mentioned services. 70% of the staffs are drawn from families dependent upon alcohol production, future programs should assist in reducing girls’ vulnerability by providing viable economic opportunities for girls and their families. The community has also enabled the program implementer in effectively scaling up the service coverage. Allowing IDUs to raise and discuss on practicable safer practices lead to better protective strategies and enforce legal rules relating to alcohol production and consumption. As many families are involved in consumption, future programs should assist in reducing girls’ vulnerability by providing viable economic opportunities for girls and their families.

Presenting author email: d.chung@rediffmail.com

WEPE0532

Successful advocacy campaign for preserving OST program in Ukraine

I. Okseniuk1, I. Boyko2, I. Iljin3, D. Sherenbym4

1All-Ukrainian Network of PLWH, Policy and Advocacy, Kyiv, Ukraine, 2All-Ukrainian Network of PLWH, Communication, Policy and Advocacy, Kyiv, Ukraine

Issues: Thanks to non-governmental initiatives OST program, financed by GFATM, which was greatly opposed by interior affairs was launched in Ukraine in the end of 2007. Nowadays the realization and scaling-up of OST program is affirmed by the National HIV/AIDS Program for 2009-2013. On March, 2009 Sevastopol city Council of Ukraine has forbidden the implementation of the local OST program and an anti-methadone campaign was launched in Sevastopol mass-media. Moreover, Sevastopol city Council appealed to all city councils of Ukraine to close OST programs.

Description: Under the leadership of the All-Ukrainian Network of PLWH Network a complex crisis advocacy campaign was developed to preserve OST program in Sevastopol city and to create its positive image. The campaign started from appealing to key decision makers at the national level and local prosecutor. A group of the Network representatives visited Sevastopol and involved its partners, MOH representatives, doctors and OST clients to join the campaign. A press-conference was held which attracted all the biggest local media. They showed positive image of the methadone program. The Network also advocated OST program at parliaments in Sevastopol via Sevastopol local authorities.

Lessons learned: Written appeals to the officials prove to be ineffective. Only direct action with wide involvement of journalists, healthcare professionals, NGOs and clients raised public interest and made Sevastopol court to preserve OST program in the city and to step aggressive anti-methadone mass-media campaign. This is the first case in Ukraine when the efforts of different sectors (governmental, non-governmental, clients) were joined together to advocate OST program.

Next steps: The Network will continue monitoring public attitudes to the OST program in different regions of Ukraine in order to prevent threats to its implementation in future.

Presenting author email: y.oksenyu@network.org.ua

WEPE0533

Self-reported symptoms in buprenorphine and methadone patients receiving antiretroviral therapy: results from the MANIF 2000 cohort study

M.P. Carrieri1,2,3, P. Roux1,2,3, I. Cohen1,2,3, I. Ravaux4,5, P. Dellamonica6,7,8, C. Protopopescu1,2,3, B. Spire1,2,3, A. Rosenblum6,9, J.-P. Moatti1,2,3

1INSERM, U912 (SE4S), Marseille, France, 2Université Aix Marseille, IRD, UMR SV912, Marseille, France, 3ORS PACA, Observatoire Régional de la Santé Provence Alpes Côte d’Azur, Marseille, France, 4Hôpital La Conception, Marseille, France, 5Hôpital L’Arche, Service des Maladies Infectieuses, Nice, France, 6National Development and Research Institutes, Inc., New York, United States

Background: The benefits of opioid maintenance treatments (OMT) on adherence to antiretroviral treatment (ART) in HIV-infected opioid dependent individuals are known, as well in buprenorphine as in methadone treatment. Nevertheless, the relationship between buprenorphine or methadone and perceived toxicity and symptoms has not been investigated in such patients.

Methods: The French MANIF 2000 cohort was used to compare self-reported symptoms in buprenorphine and methadone patients also receiving ART. We selected individuals receiving ART and OMT (342 visits among 106 patients).

Symptoms were self-reported using a list of 14 symptoms (e.g., nausea, fatigue, fever) perceived during the 4 previous weeks, including 3 painful symptoms (abdominal, muscular pain, headache). A 2-step Heckman approach allowed us to account for the non-random assignment of OMT: a probit model identified predictors of starting either buprenorphine or methadone. A Poisson regression based on Generalized Estimating Equations (GEE) was then used to identify predictors of the number of symptoms while adjusting for non-random assignment of OMT.

Results: The median[IQR] number of symptoms was 4[1-6] and 2[1-6] respectively, among buprenorphine and methadone patients. After adjustment for non-random assignment of OMT, we found a lower proportion of buprenorphine patients frequently reporting withdrawal symptoms, anxious/lethargic consumption, and daily cannabis use, methadone patients were more likely to report a lower number of symptoms than those receiving buprenorphine. Conclusion: Methadone patients on ART report fewer symptoms but buprenorphine patients on ART under treatment conditions currently used in France. Moreover, the findings underscore the need for appropriate OMT dosage guided by close monitoring of symptoms and depressive and withdrawal symptoms during the course of ART and OMT with the aim of optimizing patients’ adherence to ART. This experimental research is still needed to identify the OMT-ART strategy that minimizes the burden of self-reported symptoms and potential interactions while assuring sustainability and response to both treatments.

Presenting author email: jean-paul.moatti@inserm.fr
Lessons learned: Community. For PLHIV/IDUs but assist them in rehabilitation and re-integration into the community of providing care for the most vulnerable in Ukraine and with specialized and social services during treatment. Therefore, we strongly recommend professionals representing 24 regions in Ukraine who function through a listserv and representatives of OST patients associations, comprising patients and other supporters of OST, it aims to give patients a greater voice in decisions regarding their health care. The legislative framework regarding OST, both locally and in national legislation. They’re working to the needs of the patients.

Next steps: In collaboration with the French and American Red Cross, URC launched HBC activities for IDUs infected with HIV, through which Red Cross nurses not only provide care and support for PLHIV/IDUs but also assist them in rehabilitation and re-integration into the community.

Lessons learned: Red Cross nurses serve as important auxiliaries to state-funded medical institutions in providing care and support for PLHIV/IDUs. Red Cross nurses provide HBC for 205 beneficiaries who would not otherwise receive care. Results from surveys show that about 30% of beneficiaries have developed fewer opportunistic diseases, become more conscious of their health, and report that they are better adjusted to their diagnosis and have a more positive outlook after working with Red Cross nurses. More than 25% of informal caregivers of PLHIV have a better understanding of HIV and drug use issues, and are more frequently in contact with the medical services.

Next steps: In collaboration with the French Red Cross (IRC), URC launched HBC activities for IDUs infected with HIV, through which Red Cross nurses not only provide care and support for PLHIV/IDUs but also assist them in rehabilitation and re-integration into the community. In addition, visits to the Ukrainian Red Cross (URC) have a history of providing care for the most vulnerable in Ukraine and with specialized and social services during treatment. Therefore, we strongly recommend professionals representing 24 regions in Ukraine who function through a listserv and representatives of OST patients associations, comprising patients and other supporters of OST, it aims to give patients a greater voice in decisions regarding their health care. The legislative framework regarding OST, both locally and in national legislation. They’re working to the needs of the patients.

WEPE0535

The study on the factors of drop-out rate of methadone maintenance treatment (MMT)

V. Lin, L. Wang, H. Chen, Z. Liu

Methods: Methadone Maintenance Therapy (MMT) is widely recognized as a key component of comprehensive treatment and prevention strategy to address opioid dependence. It has been found to be highly effective in retaining a large proportion of patients in treatment by reducing drug abuse, HIV infection rate, criminal activity, and enhancing their social productivity. Drop-out rates of MMT in China however, are very high.

Description: The purpose of the study was to explore the individual and programmatic factors that influence the drop-out rates of methadone maintenance therapy programs. Data collection was based on a questionnaire and other materials. The high-impact and high-risk settings. The aim of the data analysis was to identify the minute details of cultural behavior that are of essential value to public health and provide local insights for HIV/AIDS behavior intervention.

Experience & Lessons learned: From the epic viewpoint, biological (men- tal and physical), psychological (educational and behavioral), social (discrimination) and mental (mental health status) are the four fundamental factors that have impact on the rates of MMT. There are other specific factors as well, namely: incarceration(criminal acts), drug-related deaths (suicide, overdose), accessibility (affordability and convenient hours), substitutes (methadone for heroin), illicit drug use during treatment, dosage, duration of treatment, negative attitudes about the pharmacology of methadone, involuntary discharge from treatment (or tapering), motivation, tenacity, poor facility maintenance, lack of ancillary services and fake oral administration.

Next steps: The research indicates that some of the factors that are most likely to improve retention rates include medical, psychological, behavioral and social services during treatment. Therefore, we strongly recommend programs that employ a comprehensive service model which addresses the multiple needs of individuals who are dependent on opioids.

Presenting author email: hudongchun2006@hotmail.com

WEPE0536

Buprenorphine use is associated with a higher HIV risk profile than methadone use in a community-based cohort of injection drug users (IDUs) in Baltimore, USA

S.H. Mehta, J. Zieminski, G.D. Kirk

Methods: The Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, MD, United States

Background: Opiate substitution therapy, in particular methadone, has been associated with reduced HIV risk among IDUs. However, methadone is limited by its prescription through the need for a primary care provider, and in some places a law against its use. Buprenorphine can be prescribed in a physician’s office and has been used for pain management and in the treatment of drug addiction. Buprenorphine can also be used as a substitute therapy for methadone and heroin withdrawal. It is used for substance use disorder treatment, general health conditions, and opiate substitution treatment. However, recent data indicate that buprenorphine is more efficacious and safer than methadone, and has less potential for addiction and induction of withdrawal. We characterized factors associated with buprenorphine vs. methadone uptake in a community-based cohort of IDUs in Baltimore, USA.

Methods: ALIVE is a community-based cohort of IDUs followed semi-annually since 1998, of whom 439 were queried in 2005 when buprenorphine/methadone were added. We characterized factors associated with buprenorphine vs. methadone vs. no substitution therapy using a non-parametric logistic model with generalized estimation equations.

Results: Median age was 46, 66% were male, 79% African-American and 71% were actively injecting in 2005. Methadone was reported at 23% of visits and buprenorphine 9% (35% represented buprenorphine prescribed in a physician’s office). From 2005-08, methadone take remained stable while buprenorphine uptake significantly increased (OR for 2008 vs. 2005, 1.8; 95% CI 0.3, 13.3 2.4). Buprenorphine users were significantly less likely to report methadone vs. methadone users and those reporting no treatment. HIV-infected individuals were significantly more often on methadone vs. buprenorphine. Even after accounting for time, demographics, HIV and prior methadone (which was associated with current methadone), buprenorphine users had a significantly different risk profile. Compared to those reporting no treatment and those reporting methadone, buprenorphine users were significantly more likely to report current daily injection, non-injection drug and alcohol use, needle sharing, shooting gallery attendance, overdose, homelessness and recent incarceration (<p = 0.05).

Conclusions: Persons receiving buprenorphine have a different risk profile than those traditionally in opiate substitution, suggesting that buprenorphine expands access of therapy to ever-riskier users. It is imperative that buprenorphine treatment approaches incorporate risk reduction counseling and other interventions to impact risk behavior and eventually HIV transmission. Presenting author email: shmehta@jhsph.edu

WEPE0537

Methadone-based integrated care for IDUs in Dnipropetrovsk region of Ukraine

L. Vlasenko, D. Gumeniuk, V. Dubovik, O. Lisynycha, V. Solonsky, S. Doubrov, I. Grishayeva

Methods: Methadone Maintenance Therapy (MMT), HIV, CD4, Viral load, TB testing; OST Patients Association, it aims to give patients a greater voice in decisions regarding their health and treatment regimen. Doctors control decisions regarding dosage, waiting lists, and patients’ ability to travel or receive their treatment at convenient times.

Description: At the end of 2008, a group of patients came together to form a national network of OST advocates, comprising patients and other supporters of OST, including sympathetic doctors and parents. Called the All-Ukrainian OST Patients Association, it aims to give patients a greater voice in decisions regarding OST, both locally and in national legislation. They’re working to make the health care system more transparent, accountable and responsive to the needs of the patients.

Process and outcomes: To date, the Association is a group of volunteers representing 24 regions in Ukraine who function through a listserv and in national network of OST advocates, comprising patients and other supporters of OST, including sympathetic doctors and parents. Called the All-Ukrainian OST Patients Association, it aims to give patients a greater voice in decisions regarding OST, both locally and in national legislation. They’re working to make the health care system more transparent, accountable and responsive to the needs of the patients.

Poster title: “Substitutive Treatment Advocates of Ukraine”, National network of OST advocates, comprising patients and other supporters of OST, it aims to give patients a greater voice in decisions regarding their health and treatment regimen.

Presenting author email: lesya@yandex.ua

WEPE0538

Working with leadership of people who use drugs

V. Jurak

Methods: Methadone Maintenance Therapy (MMT) and ARV is an important tool to enable access to life saving services for IDUs. Out of three clinical settings involved, AIDS center appeared to be better equipped to provide integrated MMT/ARV services.

Next steps: The next steps envisaged setting up fully functional ARV site in every drug Dependence clinic, including ARV and OST. Patients are not allowed to take ART on their own and must attend a medical visit. It is very important that both Methadone and ARV treatment monitoring ensure sustainability of the program.

Presenting author email: lesya@yandex.ua
country, and, most importantly, institutionalization of substitution treatment in Ukraine.

Lessons: The patients movement is the single greatest advocacy force behind sustainability and institutionalization of substitution treatment in the country. This group will share insights about forming a national patients movement, the challenges of such a model, and her thoughts about replicability.

Presenting author email: vitalic90@gmail.com

Social networks of IDU, family, children, workplace, social support

WEPE0539

Ensuring and scaling up the rights of drug users through network formation in Chitwan district of Nepal

B. Aryal

Recovering Nepal, Central Region, Narayangadh, Nepal

Issues: Growing number of injecting drug user’s (IDU’s), total no. of IDU’s 2017 in Chitwan, Nepal, Male 1880 and female 191, practice of high risk behaviors leading to HIV and AIDS, stigma discrimination in society, police harassment, limited service providers and were not organized, insufficient program coverage, demand of network for quality service for drug users, unhealthy competition among service providers, policy making and rights of drug users, no services for female drug users.

Description: Formation of central region network of service providers working in drug use and drug related harm, training on counseling, report and proposal writing, leadership, stigma and discrimination, financial management, coordination meeting with stakeholders, interaction with service providers, meetings with target and population, advocacy campaign and lobbying, days observation, documentary show, IEC material distribution, liaison with donor agencies, partner support fund, radio talk show, hot-line services, strengthening District AIDS Coordination Committee, formation of female forum.

Lessons learned: The network is useful in influencing policies that improve the quality lives of drug users, reinstating their rights and create a supportive environment, empowerment, motivate negative consequences of drug use and create an enabling environment. Network played vital role to decrease unhealthy competition among service providers, Limited resource and short term funding, government policy and reaching female IDU’s are major implications.

Next steps: Enhancing the capacity of the service providers specially in quality service, service expansion for females, advocacy year, sensitization workshop for political leaders and series of awareness and advocacy activities for the next steps and IBB’s among IDU’s, policy ensuring the rights of drug users and issue should be integrated with other development agendas are recommended.

Presenting author email: heresrajesh7@gmail.com

WEPE0540

Female face of harm reduction

A. Kharel

Rahmo Athiyam, HIV/AIDS, Kathmandu, Nepal

Issues: In Nepal, the issues of female injecting drug users (FIDU) are tied up with inadequate service, harmful policies, prevailing stigma & discrimination where FIDU are as leaders crafting effective harm reduction response and policy.

Description: Female Forum is an informal network of women who use drugs in Nepal that promotes comprehensive harm reduction approach as an effective strategy to providing HIV & HCV services for female drug users. Female Forum aims to build leadership and advocacy skills of FIDUs to participate meaningfully in policy making and change processes, support decision makers to improve understanding of FIDUs issues and build effective partnership. It also seeks to increase understanding of how stigma and discrimination impact the provision of Hal Reduction services for FIDUs. The project is creating an enabling environment at the policy and program level to ensure promotion of comprehensive harm reduction services to FIDU in the country in order to reduce HIV & HCV infection.

Lessons learned: Female Forum’s is providing essential harm reduction services targeting 350 female drug users in 8 districts. The capacities of FIDUs have been enhanced and networking skills strengthened. Preventing stigma and discrimination, lack of appropriate capacity by FIDU, lack of understanding of the FIDU issue by the policy makers are the major barriers faced during the project implementation. FIDUs perceived, for the first time that they were valued and needed and had skill to help others.

Next steps: FIDUs will be mobilized with extensive support to address behavior change and peer support. It is critical that female drug users themselves will be involved in decision making process which is essential for changing behaviors, perceptions, stigma and discimination. Skilled and extensive support specific to FIDU will be given so that FIDUs can become effective partners and leaders in the fight against the epidemic.

Presenting author email: alija.khare05@gmail.com

WEPE0541

Stimulant users in the drug use structure in Ukraine

L. Shulga, M. Varban*, N. Pohorila*, Y. Taran

1ICF International HIV/AIDS Alliance in Ukraine, Field Programmes, Kyiv, Ukraine, 2Independent Consultant, Kyiv, Ukraine

Background: Since 2004 Ukraine has been registering an increase in stimulant drug users. In 2009 a formative study was conducted. One of the tasks was to investigate types of popular stimulant drugs.

Methods: The study included secondary data analysis of IDUs behavioral surveys conducted in 2004, 2006, 2007, 2008. In 2004 and 2006 the respondent selection was based on the “snowball” method, while in 2007 and 2008 RDD method wused. 12 cities were compared.

Results: Over the last 4 years the number of IDUs using stimulants only (“pure stimulant users”) significantly increase by 2.5 times. The “mixed use” share (use of stimulants and/or other drugs) decreased by a third over the last three years. The remaining share belongs to the opiate use - pure or in various combinations. This share has not been reduced and varies from 64% to 69%. (Table 1)

Increase rate of the stimulant “pure use” share in provincial towns is higher and grew in 5.5 times compared to 2004; while the share of “mixed use” reduced by a third. The study shows a significant increase in the group of pure stimulant users aged 18 and younger, especially in 2007 and 2008. This share grew from 14% to 52% over the 4 years. The data proves that stimulants were initiation drugs in 28% of cases. (p < 0.05)

Conclusions: Opiate use remains popular in Ukraine. However, the general drug use structure report increase in stimulant use, especially in young IDUs that requires specific HIV prevention approach in their community.

Presenting author email: shulga@aidsalliance.org.ua

WEPE0542

Social network factors predict engagement in HIV risk behaviors among rural Appalachian drug users in the United States

J. Havens, C. Oser*, R. Crosby*, C. Leukfeld

1University of Kentucky College of Medicine, Behavioral Science, Lexington, United States, 2University of Kentucky, Sociology, Lexington, United States, 3University of Kentucky College of Public Health, Health Behavior, Lexington, United States

Background: Social network membership, and specifically membership in drug and sex networks, has been shown to predict engagement in HIV risk behaviors. However, little is known about the role of social networks and rural HIV risk in rural Appalachia—an area with marked health disparities. Therefore, the purpose of this study is to determine whether baseline network character-istics predict engagement in HIV risk behaviors at follow-up.

Methods: Participants are engaged in an ongoing longitudinal study of social networks and HIV risk among rural drug users in the U.S., the majority of which were using prescription opioids to get high. An interviewer-administered questionnaire ascertained data related to sociodemographics, drug use, HIV risk behaviors and egocentric and sociometric networks (supportive and sex). The six-month follow-up rate for this cohort is 95%.

Results: Of the 308 participants, the majority were male (62%), white (93.2%) and the median age was 31 years. The prevalence of HCV at follow-up was 53.7%. For injection-risk behaviors, those who had a greater number of injection drug using (IDU) network members were significantly more likely to be engaging in sharing of syringes or cottons/cookers/rinse water at follow-up (relative risk [RR]: 1.31, 95% CI: 1.07, 1.60) adjusting for age, race and gender. For sex-risk behaviors, position of participants in the sex network (i.e., greater outdegree centrality) positively predicted a greater number of unprotected sexual encounters in the six months between baseline and follow-up (incidence rate ratio [IRR]: 1.05, 95% CI: 1.03, 1.08), adjusting for age, race and gender.

Conclusions: Results indicate that network membership is indeed an important predictor of engagement in both injection- and sex-risk behaviors among rural Appalachian drug users. The dense network structure in rural Appalachia may lend itself to the use of network-based interventions aimed at reducing HIV risk behaviors in this population.

Presenting author email: jennifer.havens@uky.edu
Sexual transmission and drug use, sexual partners, “bridging”
WEPE0544-WEPE0553

WEPE0544 Psychosocial and behavioral characteristics of male injecting drug users who share syringes and engage in unprotected sex with sex workers in mainland China
H.Y. Tsui, J. Lau, R. Lingkong, H. Chen, C. Liu, J. Liu1 The Chinese University of Hong Kong, Hong Kong, China, 1Center for Disease Control and Prevention, Dazhou, China, 2Center for Disease Control and Prevention, Hengyang, China

Background: In mainland China, male injecting drug users (IDU) represent the largest population at risk for HIV infection. Male IDU who share syringes and engage in unprotected sex with female sex workers are at particular high risk for both acquisition and transmission of HIV. The present study looked into the psychological and behavioral characteristics of this vulnerable population.

Methods: Data on 129 Chinese male active IDU who bought sex in the last 6 months were reported.

Results: Of the respondents, the mean age was 33.5 (SD=6.42) and about half had main or casual sex partners. In the last 6-month period, 32.6% had shared injection equipment (syringes and/or other paraphernalia). 62.8% had not used condoms consistently with sex workers, 24% engaged in the type of risk behaviors (the "double-risk" group), and 21.3% had tested for HIV in the last 6 months. The "double-risk" group and other male IDU respondents who had not engaged in both injecting and sexual risk behaviors were similar in socio-demographic age, marital status, drug use, and drug-use patterns. In the "double-risk" group, the most common reason for initiation and continuation of drug use besides depression, anxiety, and emotional reasons included pro-social desire, continuing sex act, facilitating anal sex, and practicing male sex work. There is a link between drug use and sexual behavior: MSWs sold sex to purchase drugs, or used drugs to reduce inhibition when negotiating with male clients and performing sex acts. In this particular study by the MSMs and MSWs having unprotected anal sex while under influence of drugs.

Conclusions: This study highlights the need for addressing drug use and sexual risk-taking behavior in the context of the HIV interventions targeting MSM and MSWs in these cities.

Presenting author email: bao@thi.org.vn

WEPE0545 Sex under the influence: HIV risks among male clients frequenting female sex workers in Tijuana, Mexico when one or both partners are high during baseline risk assessment in a resource-limited setting
T.L. Patterson1, M. Gallardo2, S. Goldenberg3, J. Aramantova4, S.J. Semple5, A. Robertson2, S.A. Strathdee6
1University of California San Diego, Psychiatry, La Jolla, United States, 2Vederners Affairs Medical Center, La Jolla, United States, 3CAPAVIS (Centros Ambulatorios de Prevención y Atención en SIDA e ITS), Tijuana, Mexico, 4University of California, San Diego, Division of Global Public Health Medicine, La Jolla, United States

Background: Tijuana, adjacent to San Diego, CA on the US-Mexico border, is experiencing emerging epidemics of HIV and drug use. HIV prevalence among female sex workers (FSWs) and male clients is 6% and 4%, respectively. We explored HIV risks associated with commercial sex transactions in Tijuana when one or both partners were high.

Methods: In 2008, males aged >18 years who had paid or traded for sex with a FSW in Tijuana during the past 4 months were recruited in Tijuana's red light district. Men underwent testing for HIV, hepatitis, gonorrhea, and Chlamydia. Using multinomial logistic regression, HIV risk patterns were assessed among those who were both high, either neither the client and the FSW were high on drugs during sex.

Results: Of 387 men (53% from Mexico; 47% from the U.S.), median age was 37, 38% were Hispanic, and 43% were married/common-law. Most (52%) reported that both they and the FSW were high during sex; 20% reported that either was. Compared to those where neither was high, men reporting that both parties were high were more likely to be bisexual (AdjOR: 3.4; 95%CI: 1.5-7.7) and to have unprotected sex (AdjOR: 3.3; 95%CI: 1.8-5.9), higher sensation-seeking scores (p<0.005), lower self-esteem scores (p<0.001), and more friends who visited FSWs (p<0.05). None of these variables differed significantly between those reporting that either party was high during sex compared to parties where neither was high.

Conclusions: A high percentage of commercial sex transactions in Tijuana occurs when one or both partners are high on drugs, a situation that is closely associated with unprotected sex. Harm reduction interventions should be developed to promote safer sex negotiation in the context of sexual transactions and accompanying drug use. Ensuring that at least one partner abstains from drug use appears to confer some protection from risk.

Presenting author email: tpatterson@ucsd.edu

WEPE0546 Drug use among men who have sex with men in Vietnam: Implications for HIV prevention
B. Vu Ngoc, P. Giraud1, K. Mulvey2, S. Nguyen Thanh2, U. Phan Thi4, L. Tran Thi Bich4, S. Dinh Thai6, D. Le Cao6, T. Le Nhan7
1Family Health International/Vietnam, HIV, Hanoi, Vietnam, 2Family Health International/Asia Pacific Regional Office, HIV, Bangkok, Thailand, 3Substance Abuse and Mental Health Services Association, HIV, Hanoi, Vietnam, 4Ho Chi Minh City National University, Psychology, Ho Chi Minh City, Vietnam, 5Family Health International/Vietnam, HIV, Ho Chi Minh City, Vietnam, 6Ho Chi Minh City AIDS Committee, Harm Reduction, Ho Chi Minh City, Vietnam, 7Hanoi HIV/AIDS Center, HIV, Hanoi, Vietnam

Background: There is a growing evidence of drug use among men who have sex with men (MSM) across many cultures in Asia. The association between HIV infection and both injecting drug use and non-injected drugs among MSM and male sex workers (MSWs) in Vietnam has been already described, but there is a lack of understanding about its contexts and meanings to inform the design of targeted interventions.

Methods: Qualitative information was collected about the contexts and meanings of drug use, and its relationships with sexual risk-taking behaviour for HIV infection among MSM and MSWs living in Hanoi and Ho Chi Minh City (HCMC) in Vietnam. Sixty-five in-depth interviews and four focus group discussions with MSM and MSWs aged of 18 years or older and who reported the use of any kind of drugs in the past month were conducted in July and August 2009.

Results: The majority of respondents reported using different kinds of drugs either in combination (polydrug use) or sequentially, including heroin, methamphetamine, ecstasy, ketamine, marijuana, and glue. Peer pressure is the most common reason for initiation and continuation of drug use besides depression release, entertainment, energy enhancement, masculinity, self-confidence, weight control, sexual meanings, and sexual partnership. Sexual meanings include include sexual desire, prolonging sex act, facilitating anal sex, and practicing male sex work. There is a link between drug use and sex work: MSWs sold sex to purchase drugs, or used drugs to reduce inhibition when negotiating with male clients and performing sex acts.

Conclusion: MSW and MSWs reported having unprotected anal sex while under influence of drugs.

Presenting author email: bao@thi.org.vn

1The Chinese University of Hong Kong, Hong Kong, China, 2Center for Disease Control and Prevention, Dazhou, China, 3Center for Disease Control and Prevention, Hengyang, China

Background: In mainland China, male injecting drug users (IDU) represent the largest population at risk for HIV infection. Male IDU who share syringes and engage in unprotected sex with female sex workers are at particular high risk for both acquisition and transmission of HIV. The present study looked into the psychological and behavioral characteristics of this vulnerable population.

Methods: Data on 129 Chinese male active IDU who bought sex in the last 6 months were reported.

Results: Of the respondents, the mean age was 33.5 (SD=6.42) and about half had main or casual sex partners. In the last 6-month period, 32.6% had shared injection equipments (syringes and/or other paraphernalia). 62.8% had not used condoms consistently with sex workers, 24% engaged in the type of risk behaviors (the “double-risk” group), and 21.3% had tested for HIV in the last 6 months. The “double-risk” group and other male IDU respondents who had not engaged in both injecting and sexual risk behaviors were similar in socio-demographic age, marital status, drug use, and drug-use patterns (e.g., length and frequency of drug injection). The “double-risk” group, as compared with the counterparts, however, exhibited poorer HIV-related knowledge (including asymptomatic HIV infection: 38.7% vs. 62.2%; OR=0.38) and were less confident to protect himself from HIV in- fection (48.4% vs. 80.6%; OR=0.23). Further, more IDU of the “double-risk” group were to at least one HIV/STD preventive service (31.8% vs. 9.2%; OR=3.35), self-modal as an impulsive person (61.3% vs. 32.7%; OR=3.27), and scored higher on the Anger subscale of the Buss-Perry Aggres- sion Questionnaire (mean=7.97 vs. 6.90; OR=1.20). In a stepwise multivari- ate logistic regression analysis, HIV-related knowledge, self-efficacy for HIV prevention, and Anger remained statistically significant.

Conclusions: These findings call for a wider coverage of HIV preventive services, which also attending to the particular psychosocial characteristics of this “double-risk” group of male IDU.

Presenting author email: hytsui@cuhk.edu.hk

Poster Exhibition
Thursday 22 July

Abstract Book Volume 2 | www.aids2010.org
WEPE0547
Factors affecting condom use among IDUs in Indonesia
B. Tambunan1, O. Kamili2, I. Irawanti3, H. Erain4, I. Praptoraharjo2
1Atma Jaya Catholic University, AIDS Research Center, Jakarta, Indonesia, 2University of Illinois at Chicago, Public Health, Chicago, United States

Background: HIV infection among IDUs has been a major factor affecting the epidemic in Indonesia. In addition to the use of non sterile needles, HIV transmission through sexual behavior is also considered among this population. A survey was conducted in order to examine the factors that influence the condom use among IDUs.

Methods: A number of 720 IDUs (53 women; 667 men) from 10 cities and 6 provinces were recruited for this study. Cross tabulation and generalized estimating equation have been applied to analyze the data.

Results: The result shows that the using condom is affected by IDUs’ perception on risk of infected by HIV. One of the risk factor is the understanding of their sexual partner, such as whether the partner is IDU or not, or the partner have another sexual partner or not. For example, if IDU knows that her/his partner has another sexual partner, the possibility to use condom is 1.5 times than if her/his doesn’t know (p< .05). The risk perception declines when there is a communicable transaction between couples including in condom negotiation. For example, IDU who never ask the partner what is her/his feeling when using condom, will use condom 0.5 times less likely than if IDU has raised the topic in their conversation (p< .001). The number of using condom is increase from steady partner, casual partner, to commercial partner. In addition, it is still very low the number of women who offer condom to her partner (20.5%).

Conclusions: The study implies the importance of reaching the IDUs’ partners. Education and information regarding reproductive health and how to deal with drugs dependency are needed for the partners as well. Creating the environment where the couple can develop a healthy relationship is also useful, such as by offer couple counseling for the IDU and the partner.

Presenting author email: raymoo@gmail.com

WEPE0548
Crack use, sex trading and male bisexual behavior: implications for HIV diffusion
W. Zulu, G. Bobashev, W. Wechsberg, H. Jones, C. Coomes
RTI International, Research Triangle Park, United States

Background: In HIV research, gay and bisexual men are often lumped together as men who have sex with men (MSM). However, they differ in important ways that may influence their risk for HIV infection and transmission. Moreover, there may be variations among men who have sex with men and women (MSBW or bisexual men) that may affect their risk of HIV infection and their potential to serve as a bridge for the sexual spread of HIV from MSM to women and the general population.

Methods: MSMW (n=164) were recruited using respondent driven sampling (RDS) in central North Carolina between 2005 and 2008. Cluster analysis was used to classify these men into clusters based on their drug use, involvement in sex trading, sexual identification and homelessness. Additional analyses were conducted to examine the relationships between cluster membership and risk behaviors with men and disclosure of bisexual behavior to women. Results: Three clusters emerged in a three cluster solution. The clusters varied significantly by age, race, homelessness, sexual identification, involvement in the sex trade (i.e. both buying and selling sex), HIV status and drug use. Clusters also varied significantly in the size of drug-using networks. In multivariate models, cluster membership was a significant predictor of in-service and drug testing. Cluster membership was also a significant predictor of non-disclosure of bisexual behavior to women.

Conclusions: The results suggest that there are important differences among MSMW that influence the risk of HIV infection and transmission and their potential to serve as a bridge for the sexual diffusion of HIV from MSMW women and the general population. Cluster membership may provide a useful guide for tailoring interventions to different groups of MSMW.

Presenting author email: zule@rti.org

WEPE0549
Drug use in Nicaragua: challenges for harm reduction in a low HIV prevalence country at risk
P. Ortega 1, M. Shedlin2, R. Araujo3, M. Aburto4, D. Noro2
1Fundacion Nimehuatzin, Managua, Nicaragua, 2New York University, College of Physicians and Surgeons, New York, United States

Background: NH funded an exploratory study, carried out by an interdisciplinary team of researchers, with high-risk behavior groups in two cities in Nicaragua. The objectives were to: identify methods of reaching drug using population across the country; provide an initial description of patterns of drug use; explore how drug use influences HIV transmission; and provide recommendations for the development of drug use and HIV prevention efforts for the future. 

Methods: Semi-structured individual interviews with current drug users (121), key informant interviews (30) and focus groups (13) with health personnel, sex workers, self identified MSM, university students, taxi drivers, and friends of drug users (total 99). Ethnographic observation added additional qualitative data. Analysis used Atlas.ti and SPSS

Results: Identified cultural and contextual factors influencing pattern of drug use, and provides historical perspective, as well as current information on risk factors for lowincome men and women. Their reporting of ubiquitous drug supplies along with unprotected sex with partners, sex for drugs and/or drug money, sexual acceptability of anal sex, group drug purchase and sharing, and (limited) needle use and equipment sharing, all illustrate factors affecting HIV transmission. Data documents that increasing supply, easier access, more involving and pleasurable drug experiences for groups and the lack of prevention, treatment and appropriate policies create and sustain environments of the drug user.

Conclusions: An urgent response is called for to face the multiple challenges of harm reduction and prevention in the country. Strategies must be developed that include education and community mobilization. Public policies must make a clear distinction between drug trafficking and drug use and must support humanitarian strategies to reduce harm. Respect for Human Rights must also be promoted, as well as prevention of discrimination and stigma of drug users and people living with HIV, if the country is to avoid full scale epidemics.

Presenting author email: pascuar.ortes@nimehuatzin.org

WEPE0550
The relationship between money spent on drugs, sex work volume and sex work income: time to decriminalize drug use to prevent harm among Canada’s most vulnerable women?
K. N. Deering1, M. W. Tyndall2, N. Khan3, R. Zhang4, J. Montaner1
1University of British Columbia, School of Population and Public Health, Vancouver, Canada, 2BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 3BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 4Faculty of Medicine, University of British Columbia, Vancouver, Canada, 5London School of Economics, London, United Kingdom

Background: Evidence suggests that criminalized drug policy approaches drive up drug costs and likely exacerbate harms among women who live in poverty and exchange sex on the streets in Canadian settings, including increased rates of violence and HIV. This study investigated the relationship between the amount of money spent on drugs and sex work income among street-based female sex workers (FSWs) in Vancouver, Canada.

Methods: The study sample was comprised of 110 street-based FSWs who use drugs and enrolled in a prospective cohort (2006-2008), a detailed questionnaire elicited information on demographics, drug use, non drug-related safety, sexual and drug-related harms. Bivariate and multivariable linear regression was used to model the relationship between average weekly money spent on drugs and average weekly sex work income. Both variables were log-transformed to address highly skewed data.

Results: The median age of the sample was 36, with 50.8% self-identifying as Aboriginal and 25% HIV-positive. The median weekly sex work income was $290 (interquartile range $[QR]=[$100-$550]), the mean weekly number of clients was 11.0 (median=5;QR=2-14), and the median amount spent on drugs was $350 ($QR=[$100-$750]). In multivariable linear regression, adjusting for individual socio-demographic characteristics, client volume and drug use patterns, for each ten percent increase in the amount spent on drugs, sex work income increased by 4.5% (p< 0.001). For each additional client, sex work income increased by 1.2% and daily crack cocaine smoking was associated with a 36.6% reduction in sex work income (p=0.03).

Conclusions: Study findings indicate a strong positive relationship between money spent on drugs and sex work income among street-based female sex workers (FSWs) who use drugs in a Canadian setting. These findings demonstrate a vital need to scale up availability and access to gender-based HIV prevention and addiction treatment strategies for highly vulnerable women and should mobilize government and policy makers to address the failings of current drug criminalization and enforcement-based approaches.

Presenting author email: kdeering@interchange.ubc.ca

WEPE0551
Condom-related stereotypes as a restraint of IDU women’s right to safe sex in Ukraine
K. Maksymenko1, A. Doubaki2, M. Varban3

Background: HIV prevention among IDUs via sexual way of transmission is still an issue in Ukraine. Behavior monitoring among IDUs in 2008 demonstrated that only 54% of respondents used condoms during last sexual contact. Women did so more rarely that men (p = .05). Gender stereotypes related to sex and condoms have not been considered as reason for not using condoms so far.Presenting study covers this gap partially.

Methods: Firstly, qualitative research among 42 female and 38 male IDUs helped to identify condom-related stereotypes hindering for safe sex. Then questionnaire poll of 589 IDUs was performed. The sample was quoted by sex, age, and residence region. HIV-service NGOs assisted in accessing the target group.

Results: Revealed negative stereotypes towards condoms demonstrate connection with issues of gender, power, trust, and satisfaction. The results proved that such attitudes are widespread: only 13% of respondents did not agree to any of the 8 listed stereotypes. Men are more inclined to share such opinions rather than women (p = .001). Simultaneously, men are more inclined to make decisions about using condoms while women follow their potential to serve as a bridge for the sexual spread of HIV from MSM to women and the general population. Cluster membership may provide a useful guide for tailoring interventions to different groups of MSMW.

Presenting author email: kdeering@interchange.ubc.ca
WEPE0552

Addressing spousal transmission as part of HIV intervention efforts in Asia: needs, current practice and challenges

M. Sharma1, V. Macdonald1; Y.S. Hoon2
1HLSP, Bangkok, Thailand, 2UNODC, Yangon, Myanmar

Issue: It is estimated that 75 million men buy sex in Asia regularly. Another 20 million men are at risk of HIV infection due to unsafe injecting drug use (IDU). IDUs are at high risk of HIV due to high needle-sharing (57.4%) and needle sharing among IDUs’ 64% where main risks factors. There are implications for both female condoms, lubricants, disclosure and couple counselling.

Lessons learned: Harm reduction programs in Asia typically distribute sterile injecting equipment and condoms. Services are frequently male oriented and spouses of substance users rarely use them. As part of addressing the needs of spouses and partners of substance users, the AsiaAID funded HIV/AIDS Regional Asia Program (HAARP) in Myanmar has expanded the service package to include sexual and reproductive health services – specifically contraception, screening and management of sexually transmitted infections, testing and counselling, referral to prevention of mother-to-child transmission services. This has been achieved through establishing partnerships with other agencies. Over 500 sexual partners were accessing services in the first half of 2009 in Myanmar.

WEPE0553

Do risk behaviors of HIV-positive MSM present a risk for Hepatitis C transmission?

B. Stall1; W. Chong2; W. Mcfarland3; H.F. Raymond2; G. Coltaz2; H.-M. Tsung4
1University of Pittsburgh Graduate School of Public Health, Pittsburgh, United States, 2San Francisco Department of Public Health, San Francisco, United States, 3Medical Research Council, Durban, South Africa

Background: There is a growing body of research suggesting that HIV-positive MSM are at increased risk for HCV compared to HIV-negative individuals. HCV and HIV co-infection rates vary depending on the region of the United States.

Results: Of the total 1,104 men who were included in the analysis, 18% of the men reported at least one sexual risk behavior that is associated with a high likelihood of HCV transmission, including: sharing a needle with someone who injected drugs before them or during the time of injection; having sex with someone who injected drugs before them, or engaging in anal sex with someone who injected and shared needles; or other unprotected sexual exposure to someone who has injected drugs. In this sample, HCV prevalence was 11.6%.

Conclusion: HCV prevention efforts should focus on reducing sexual transmission of HCV through safer sex practice, harm reduction approaches, and linkage to care, including pre-exposure prophylaxis.

WEPE0555

New model of harm reduction for street children in Odessa, Ukraine

T. White1; S. Kostin2
1Elton John AIDS Foundation, London, United Kingdom, 2Odessa Charity Fund the Way Home, Odessa, Ukraine

Objective: To reduce the spread of HIV and Hepatitis C among street children and youth in Odessa, Ukraine.

Methods: A new model of harm reduction involves street children in the planning and implementation of their services. This model focuses on the development of street children as peer educators and leaders.

Results: The new model has reduced the number of drug injections among street children and increased the use of clean needles. The model has also increased the number of street children enrolled in educational programs.

Conclusion: A new model of harm reduction can be effective in reducing the spread of HIV and Hepatitis C among street children and youth.

WEPE0556

Evidence-based HIV prevention interventions for vulnerable women in South Africa: findings and the need to scale up

W. Wechsberg1; R. Middlesteadt-Ellerson2; F. Browne2; W. Zule2; H. Jones3; B. Myers4; C. ferry1; R. Jekew5
1RTI International, Substance Abuse Treatment Evaluations & Interventions, Durham, United States, 2RTI International, Cape Town, South Africa, 3Medical Research Council, Cape Town, South Africa, 4Medical Research Council, Pretoria, South Africa

Background: Evidence-based HIV prevention interventions for vulnerable women in South Africa: findings and the need to scale up

Methods: The aim of this study was to evaluate the effectiveness of evidence-based HIV prevention interventions for vulnerable women in South Africa. This included an evidence review and a systematic review of existing interventions.

Results: The study found that there is a lack of evidence-based interventions for vulnerable women in South Africa. The main findings were that there is a need for more research on effective interventions and that there is a need for scaling up existing interventions.

Conclusion: There is a need for more research on effective interventions and scaling up existing interventions for vulnerable women in South Africa.
WEPE0557
A comprehensive assessment on harm reduction service interventions in 15 districts of Nepal

A. Pun1, U. Karmacharya2, M.P. Adhikari2, H. Bodali3
1Recovering Nepal, Central Secretariat, Lalitpur, Nepal, 2Recovering Nepal, BACK UP Project, Kathmandu, Nepal, 3German BACK UP Initiative, Eschborn, Germany

Background: In 2009, Recovering Nepal, a network of people who use drugs in Nepal, conducted an assessment on drug services in 15 Injection drug use [IDU] hot spot districts of Nepal. The purpose of this study was to comprehend the gender perspective on drug usage and to assess the harm reduction interventions.

Methods: The study used the ‘purposive sampling’ where 681 respondents (male DU= 597 and Female DU=84) were interviewed. Harm reduction services, IDU hot spots, and the India-Nepal border were observed where provided useful insights and understanding of drug dynamics, gender perspective of drug usage and service coverage.

Results: Findings showed that approximately 90 percent of IDUs use cocktail of injecting pharmaceuticals resulting severe injection related infections and injuries. With rapid population growth and urbanization, drug use was moving to the suburbs, hospitals, and rural areas where services were non-minimal. More than 80 percent of female drug users remained hidden from harm reduction services. Harm reduction services were not regarded by female injectors as highly accessed.

Conclusion: The study recommends that national harm reduction policies and programmes should be based on science and evidence. There is urgent need to scale up the service to confront the epidemic. Many services cater primarily for male and are not organized to serve female DU. This gender gap calls for further analysis of differences and redesign of services for girls and women. A new and improved model of harm reduction service should be developed to have impact on the epidemic and special mechanisms should be in place to cater services during holidays and strikes as risk behaviors significantly increase in such period. The ‘quality’ of drug is also an important issue to consider. The risk is not just in sharing dirty needles, but also in using low quality drugs.

Presenting author email: ananpun@gmail.com

WEPE0558
Using block curricula: a new approach to improve HIV and AIDS pre-service training in Hai Phong, Viet Nam

H. Ngo Van, T. Pham Xuan, M. Le Thanh, T. van der Velden
Pathfinder International, Hanoi, Viet Nam

Issues: Hai Phong has the highest HIV incidence and prevalence rates in Viet Nam. Most of newly infected HIV cases in Viet Nam are intravenous drug users (IDUs). Currently, curricula for medical and nursing students are primarily theory-based, taught in a highly fragmented fashion and have limited HIV/ AIDS content. Training has mostly been on-in service rather than pre-service training. As a result, graduating students face difficulty in responding to the needs of HIV-related services in general health settings.

Description: Since 2007, with support from PEPFAR, Pathfinder International/Viet Nam supported the development and implementation of comprehensive, skills-based curricula for HIV/AIDS care and treatment services at Hai Phong Medical University (HPUH) and Hai Phong Medical (nursing) College (HPNC). Pathfinder provided technical assistance to update curricula to include effective teaching methodologies, core primary health care skills (e.g., screening for drug use), HIV/AIDS Updates, and instruction on how to develop and strengthen practicum sites at teaching hospitals and within the community. Three- and four-week rotations were designed and used in both HPMU and HPMC. Feedback received from 297 nursing and 123 medical students in the 2008-2009 academic year was used to improve curricula. In 2009-2010, 268 medical and 500 nursing students will be taught with revised HIV/AIDS curricula.

Lessons learned:
- Comprehensive skills-based curricula allow students to practice HIV/AIDS care, treatment, and counseling skills, work directly with, understand the issues and counseling needs of IDUs and people living with HIV/AIDS (PLWHA).
- Pre-service medical education allows for a systematic approach to HIV/AIDS prevention, care, treatment, and support, particularly in rural primary health care level.
- Remaining challenges include time and coordination limitations of instructors to train on HIV/AIDS related clinical skills.

Next steps:
- Dissemination of lessons learned nationally and internationally.
- Scaling up to additional medical universities and medical colleges in Viet Nam.

Presenting author email: nvhuu@pathfind.org

WEPE0559
Prevalence of hepatitis C infection (HCV) and related factors among injecting drug users (IDUs) in Estonia, Latvia and Lithuania

A. Karmo1, A. Usuki1a, M. Raag1, K. Rüüt1, A. Talu1, K. Abel-Ollo1, H. Bodali3, T. van der Velden2, S. Čaplinskienė1, J. Kaplica1, J. Užupis1, M. Veronika2
1Riga Stradins University, Department of Public Health and Epidemiology, Riga, Latvia, 2University of Tartu, Department of Public Health, Tartu, Estonia, 3National Institute for Health Development, Tallinn, Estonia, 4Mykolas Romersis University, Social Policy Faculty, Vilnius, Lithuania, 5AIDS Centre, Vilnius, Lithuania, 6Infectology Center of Latvia, AIDS Program Unit, Riga, Latvia

Background: While high prevalence levels of HIV among IDUs are reported from several Eastern European countries less is known about HCV prevalence and associated risk factors. Thus the purpose of the study was to investigate the prevalence of HCV and related risk factors among IDUs in Baltic countries.

Methods: A cross-sectional study among current IDUs was conducted in 2007/2008 in the capital cities of the Baltic States. A total of 350 respondents in Tallinn, 407 in Riga and 400 in Vilnus were recruited for an interviewer-administered survey and venous blood sample collection for HCV testing using respondent-driven snowball sampling. The spread factors among HCV-positive comparing to HCV negative IDUs was identified. Crude and adjusted odds ratios were calculated.

Results: Proportion of men in the study sample was 79% in Riga, 82% in Vilnus, and 84% in Tallinn. The HCV prevalence among IDUs was high in all the three countries - in Latvia 74%, Estonia 94%, Lithuania 95%. In Latvia and Estonia HCV prevalence was higher among long-term IDUs (< 2 vs. 5+ years: AOR 4.8 (2.1-10.8) (95% CI shown in brackets) and 18.8 (3.9-91.8) respectively) and among opioids injectors (AOR 2.2 (1.1-4.4) and 4.0 (1.0-16.1) respectively). Only in Latvia higher injection frequency was associated with an increased risk for HCV (< daily vs. daily): AOR 4.0 (1.6-10.4)). HCV infected IDUs had higher odds for being clients of the harm reduction services (needle exchange program in Estonia AOR 11.6 (3.4-40.1); drug treatment in Latvia AOR 3.4 (1.7-6.5); Latvian IDUs, who had ever been imprisoned, had higher odds for HCV (AOR 2.1 (0.9-5.2)). No significant association between sexual behaviour and HCV seropositivity was observed.

Conclusions: High HCV prevalence rates in the Baltic States show that health care services must consider the increasing need for hepatitis prevention, treatment and care among IDUs.

Presenting author email: anda.karmo@rsu.lv

WEPE0560
Methadone assisted therapy outcomes and clinical characteristics of patients in the pilot program in Ho Chi Minh City, Vietnam

T. Giang1, T. Thinh1, V.T.T. Trieu1, D. Chinh2
1HCMC AIDS Committee, Ho Chi Minh City, Viet Nam, 2Institute for Hygiene and Public Health, Ho Chi Minh City, Viet Nam

Background: HoChiMinh City (HCMC) has the highest number of HIV infections in Vietnam, primarily due to injecting drug use. In June 2008, HCMC began Methadone maintenance therapy (MAT) in the district HIV centers using standardized MAT guidance from the Ministry of Health. Routine HIV counseling and testing and HIV treatment was provided. We describe the MAT outcomes and clinical characteristics of patients in this program.

Methods: Analysis included a retrospective, cross-sectional assessment of patients who started MAT between June 2008 and November 2009. Pearson chi square tests were used to calculate trends in positive urine tests.

Results: Among 766 patients who started MAT, mean age was 30 (± 5.4) years and 92% were male. Seventy percent had a history of heroin detoxification in government rehabilitation centers. 7.1% stopped MAT voluntarily and 7.7% stopped due to incarceration. Two percent died. The mean duration of the induction phase and stabilization phases was 35 and 27 days, respectively. Urine tests were heroin-positive for 65% of the patients in the induction phase and 35% in the maintenance phase (p< 0.001).

Conclusions: The pilot program has demonstrated initial positive outcomes, promoting the government of Vietnam to increase commitment to MAT scale-up nationally. Given the high prevalence of co-infection with HIV, HBV, HCV, and TB, there is a need for strong patient monitoring and program coordination.

Presenting author email: nguyenst@vn.cdc.gov
WEPE0561
Turning it in; perceptions of HIV-positive volunteers as counselors at VCT centers in Nigeria, a qualitative study

Y. Abdul Misau1, A. Bakari Gerel1, N.A.S. Bint Abdul Mohsein1
1University of Malaya, Dept of Social and Preventive Medicine, Kuala Lumpur, Malaysia, 2Bauchi Specialist Hospital, Dept of Medicine, Bauchi, Nigeria, 3Ahmadu Bello University, Dept of Medicine, Zaria, Nigeria

Background: The concept of “positive prevention”, preventing HIV with people living with HIV (PLWHA) has been generating interest among stake holders. But little is done to assess the impact of positive prevention to the people living with themselves. Many PLWHA are involved at various stages of prevention and care activities in Nigeria. It is not known how their involvement has benefited or harms their wellbeing.

Objective: The aim of this study is to gain an understanding of how PLWHA involved in positive prevention have fared as counselors at VCT center in Nigeria.

Methods: Six PLWHA volunteer counselors at VCT center of Bauchi specialist hospital in Northern Nigeria were purposely selected and asked to participate in this study. All the six selected participants consented and were enrolled. A focus group discussion was conducted using pre-designed questions as guide. Discourse was tape recorded and transcribed. Responses were presented back to participants for validation. Data analysis was done using Nvivo software.

Results: Participation of PLWHA in positive prevention leads to disclosure of their status at free will. All the participants feel their roles in VCT center makes them comfortable. Majority of the participants take time to share their personal experiences with their clients and feels much relieved of some anxiety. Few of the participants are willing to go on local media to advocate VCT to their communities.

Conclusion: Positive prevention potentially leads to increased uptake of VCT, but as well could be an important tool for dealing with psychosocial issues. Further qualitative studies will be needed to assess the impact of positive prevention on the quality of life of PLWHA.

Presenting author email: yusufmisau@yahoo.com

WEPE0562
Religious leaders crusading against HIV/AIDS stigma in Sierra Leone
A. Freeman

issues: stigma is increasingly serving as barrier to treatment as patients refuse to visit VCT and treatment services for fear of being identified as person living with HIV. Perceptions are built very often by opinion leaders such as religious leaders since Sierra Leonean population is estimated to be 40% Christian and 50% Muslims and 10% traditional religious. Description: HIV diagnosis has often been received as a death sentence leading to stigma and rejection. Religious leaders preach that HIV infection is a judgment from God because of sin relating to sexual immorality. In response to this wave of judgementality, a project has been implemented over the last 12 months in Sierra Leone to engage religious leaders to use their positions of respect and influence in their respective community to incorporate HIV messages that is human right oriented and compassionate in nature.

Lessons learned: Personal knowledge and sharing with religious leaders, urging them to serve as advocates on the human rights of people living with HIV has increased acceptance of people living with HIV and AIDS. This has translated into increased uptake of VCT services among religious leaders and their congregations.

Next steps: Training of trainers conducted to build the capacity of religious leaders must continue to reach the rural communities where religious leaders command great influence. Religious leaders must be encouraged to use songs, story telling and community drama to achieve greater impact in a population of high illiteracy.

Presenting author email: abeinstein7@gmail.com

WEPE0563
Benefits to becoming a speaker in a HIV-positive speakers’ bureau
S. Lambert1, H. Wang2, C. Fernandes3, Z. Gui1, S. O’Connor1
1Queensland Positive Speakers Bureau, Brisbane, Australia, 2Queensland Positive People, Brisbane, Australia, 3Queensland Positive People, Brisbane, Australia

issues: In Queensland, Australia, a state in the north with a population of 4 million and with approximately 2300 PLWHIV, the profile of HIV and the visibility of HIV is diminishing as it moves from the era of HAART to the era of chronic disease management. There remains strong adverse discrimination and prevention reasons why HIV should remain highly visible.

Description: The Queensland Positive Speakers Bureau (QPSB) has been formed in Queensland to assist in this area. QPSB is unique as it combines HIV, hepatitis B and hepatitis C positive speakers and concentrates on development of speaking skills rather than on content knowledge. Engagements aim to empower individuals living with viral hepatitis and HIV and the audience to assist in breaking down stigma and promoting positive images of viral hepatitis and HIV. Speakers come from diverse backgrounds and experiences making their speeches engaging, thought provoking and unique. Speakers are provided with the tools to effectively speak in public, encompassing the full set of speaking techniques, gaining remuneration for sharing their story as well as a support network of peers.

This approach has highlighted the benefits that the individual speaker gains from being involved. This presentation focuses on these benefits. They include empowerment of the individual; enhancement of self esteem; enjoyment of camaraderie; learning and demonstration of specific skills that can be applied to other scenarios; and the sense of hope that a difference is being made.

Lessons learned: Public speaker by PLWHIV is not only of benefit to the audience, it is enormously helpful for the individual. Focussing on speaking skill development rather than HIV content opens doors to greater opportunities.

Next steps: The QPSB continues to increase its pool of speakers and will expand into regional centres across Queensland. The aim is to become monetarily self sufficient through payment of speaking engagements. Presenting author email: ajoon@gmail.com

WEPE0564
Addressing the low uptake of primary health care services by general practitioners for people living with HIV [PLWHIV] in the United Kingdom
A. Namiba1, A. Anderson2, I. Tolowinska3
1Positively Women, Primary Care Access, London, United Kingdom, 2Positively Women, London, United Kingdom, 3University of Queensland, Brisbane, Australia

issues: PLWHIV taking ARVs are living among developing and associated health related conditions including diabetes, cardiovascular disease and chronic obstructive pulmonary disease. Conditions better managed by primary health care providers. Therefore, there is a need for PLWHIV to effectively access primary health care services. However, PLWHIV in the UK traditionally access healthcare through HIV clinics/physicians. Description: PLWHIV were involved at all stages of the development of the survey.

To develop the survey and interviews, a literature review and a questionnaire pre survey with over 200 PLWHIV were carried out to find out their attitudes to accessing primary health care services. Main survey was carried out over 5 months through one-to-one structured interviews; focus group discussions and questionnaires. These were conducted with 3 target groups; PLWHIV; General Practitioners and Specialist HIV clinicians.

Lessons learned: Key issues/Concerns identified from survey:
PLWHIV
1. Concerns around the clinical competence of General Practitioners around management of HIV, and breaches of confidentiality. 2. Lack of clarity between HIV related and general medical conditions.

Specialist HIV Clinicians
1. Concerns around not being best placed to manage long term conditions such as CVD and COPD.

General Practitioners
1. Concerns around managing HIV, in particular ARV drug interactions with other prescribed medication.

Next steps:
1. Develop a model of care whereby a pool of ‘super’ General Practitioners is trained to specialize in the care of patients living with HIV.
2. Specialised General Practitioners work within HIV clinic to support transition of patients accessing primary health care services.
3. Training support and skill up of patients living with HIV to access primary health care with confidence.

Presenting author email: aNamiba@positivelywomen.org.uk

WEPE0565
Development of an all-embracing intervention for and by HIV+women in Spain: the EVhA project
B. Bautista1, M.J. Fuster2, U. Garcia3, D. Alegria4, A. Burgos5, J. Beltran de Olateara, C. Martinez6, M.V. Vazquez6, R. Almeida7, 1Universidad de Zaragoza, School of Medicine, Zaragoza, Spain, 2Unicenter, Valencia, Spain, 3AMIGOS, Association, Benidorm, Spain, 4IBasurado Association, Bilbao, Spain, 5AMIVH Association, Murcia, Spain, 6Apoyo Positivo, Association, Madrid, Spain, 7Comite Anti-sida de Burgos, Burgos, Spain, 8ACCAS, Santander, Spain, 9Comision Ciudadana Anti-sida Rioja, Logroño, Spain, 10RED2002, Barcelona, Spain, 11Amigos contra el Sida, Las Palmas, Spain

issues: Now patients long-term wellbeing is a main goal managing HIV-infection, an special focus on HIV+women specific needs is clearly a gap to cover. We have developed an innovative project on HIV+women in Spain with the main objective of improving their daily quality of life.

Description: The project is based on increasing the HIV+women’s level of information on HIV-related aspects from a gender perspective, providing social support network, and with tools/skills that enhance their personal resources, facilitating social integration. Intervention takes place through an specific HIV+women annual meeting, organized by them too and divided in two session categories: oral presentations by professional experts and active workshops aimed at increasing HIV+women personal resources. Last year, 90 HIV+women from different Spain regions attended the meeting. Psychological and gynecological aspects of HIV infection in women, adherence to treatment, lipodystrophy and hepatitis C co-infection were main matters emerging. Meanwhile, workshops addressed: self-esteem and emotional self control, sexuality, activism, emotions through take me wake.

Lessons learned: A qualitative assessment of the intervention (M= mean
WEPE0566
Fighting a double war: stigma and poverty among female PLWAs
P. Wairimu Kanyari
Methodist Church, Xining, Health and Community Work, Xining, China

Issues: Kenya has a HIV/AIDS prevalence of 7.4%: 60% of the 1.3 million adults infected are women. This spells doom for families due to the critical role played by women in family well being by taking care of children and the elderly in the presence of HIV/AIDS. A family with a HIV infected woman loses not only source of care and income but the meager income has to cater for her additional medical expenses putting more financial and psychological strain on the family.

Description: A local faith based organization in Xining district in Kenya had a group support program for HIV infected women. The group initially started as a post test club with 7 HIV-positive women in 2007. Their goal was to create an avenue of infected women to encourage each other to live positively. The group has since incorporated income generating activities as part of their activities. They built a business plan targeting supply of school uniforms as their niche. They solicited for and received seed pack size of KES. 3,875 and began business.

Lessons learned: Membership for the group has grown to 22 showing more people are seeing the need to come out towards their HIV status and thus reducing the number infected. The group has monthly income of KES. 562 whose income is shared among members and the other half is banked. Through these monthly proceeds, members have weekly contribution towards a merry go round. One of the members, Lady Z, a 42 year old mother of 7 has started her own business selling cereals. She makes KES. 37.5 per month in addition to group’s income. With this, she is able to take care of her family including her HIV positive husband.

Conclusion: HIV infected women can still make big contribution to their families if they are empowered.

Next steps: Scaling up of the program is underway.

Presenting author email: bancykanyari@gmail.com

WEPE0567
The effect of PISEN (paquet intégre de services essentiels de nutrition) on the nutritional status of people living with HIV/AIDS (PLWHA) in Dakar and Ziguinchor, Senegal
D. Cissé1, B.K. Collé2, M. N’dione1, C. Tendeng1
1Centre National de Nutrition et de Recherche en Sanitaire, Dakar, Senegal, 2Caholic Relief Services, Inc., Arlington, United States

Background: PLWHA are generally classified as at-risk or highly vulnerable group as a result of the interplay between raised metabolic requirement and malabsorption of nutrient intake. Adequate nutrition is the fundamental part of the care and support for PLWHA. Nutritional support is therefore an efficient means of ensuring that PLWHA live an optimum and positive life.

The PISEN is therefore targeted at improving the nutritional status of the PLWHA. This study evaluated the impact of the inclusion of PISEN on the nutritional status of the PLWHA.

Methods: This quasi-experimental study adopted a convenient sampling technique to select 374 PLWHA. This post-intervention study was carried out in September 2007, two years after the baseline study. Structured questionnaires were administered and anthropometric measurements were assessed.

Results: The prevalence of under nutrition amongst the PLWHA respondents reduced from 21% to 12.3% and over nutrition estimate from 28% to 22%. However, the body weight of respondents with normal nutritional status increased slightly by 6.3%. The integration of PISEN to the health services targeted towards PLWHA has a significant effect on their nutritional status.

Conclusions: The integration of PISEN to the health services targeted towards PLWHA has a significant effect on their nutritional status. Adopting this package with health facilities for the PLWHA in Senegal and other similar environments particularly in the Western African sub-region will go a long way in improving the nutritional status of the PLWHA.

Presenting author email: debcollison@yahoo.com

WEPE0568
Sexual behaviour among people living with HIV and AIDS in Kathmandu Valley, Nepal
1Youth Vision Services for Drug Users and PLHA, Kathmandu, Nepal, 2Faculty of Medical Sciences, Nepal Medical College, Kathmandu, Nepal, 3National Centre for AIDS and STD Control, Kathmandu, Nepal, 4Kathmandu Medical College, Kathmandu, Nepal

Description: We conducted a cross-sectional survey among 145 HIV-positive people of age 18-49 years in Kathmandu valley from May to November 2009. Pre-tested interview guidelines were used for data. Categorical variables were compared using Pearsons’ Chi square test. Odds ratio was calculated to measure the associations.

Results: Of total, 76.3% were sexually active in past 6 months. Male, married, longer duration from diagnosis and good health status were associated with having sexual relation. A high proportion (44.1%) of sexually active PLHA had unprotected sex within past 6 months. The major reason for not using condom was HIV-positive status of partner; for males the reason was reduction in sexual pleasure and for females it was rejection to use condom by their partner. Around 55% of the sexually active participants had HIV-positive partner(s), 31.3% had HIV sero-negative partner(s) and 21.9% had partner(s) with unknown sero-status. About 80% had sex with current regular partner, 15.7% with commercial partner(s) and 18.7% with casual partner(s). Having unprotected sex was associated with younger age, residing permanently outside Kathmandu valley, presence of STI symptoms, no CD4 count within last 6 months, lower sexual status and being more than one lifetime sexual partners, positive HIV status of partner and more optimistic belief on ART.

Conclusions: High risk behaviour was recorded among PLHA in Kathmandu valley. It suggests the urgency of implementing interventions promoting safer sexual behaviours especially consistent condom use among PLHA in Kathmandu valley.

Presenting author email: shriunim@gmail.com

WEPE0569
Building PWHA capacity in self management and advocacy skills through training and mentoring
J. Hatchett1, J. Pedragi2, B. Berrios2, B. Cicatelli3, J. Belli4

Issues: Advancements in care and treatment have greatly improved the survival of persons living with HIV/AIDS (PLWHA). However, in regions where treatment access is low, care has shifted from one of infectious disease to a chronic disease model. Given this, adherence to treatment and effective utilization of healthcare services are now more crucial than ever. Self-management, in particular, has been shown to improve treatment adherence and health status of PWHA and is becoming widely accepted as a best practice in HIV/AIDS prevention.

Description: The PWHA Leadership Training Institute (LTI) was established in 1999 and has trained over 1,200 graduates, the majority of whom are women (>51%) and transgender persons (>3%). LTI graduates serve in a wide range of leadership roles in communities, PWHA networks, community organizations and government agencies. In 2007, the LTI began constructing a specialized program, entitled Self-Management: Becoming Your Own Health Care Advocate. In addition to providing comprehensive training in leadership, advocacy and self-management skills, specially trained mentors are assigned to graduates of the program. Mentors, graduates of the LTI, have demonstrated successful management of their HIV healthcare, making regular contact with patients as a way to follow their health care action plans. Evaluation findings indicate increases in graduates’ understanding of the importance of adherence, confidence in self-advocating for healthcare, taking medications regularly, and connectivity with others.

Lessons learned: The combination of knowledge and skills training accomplished by ongoing contact and support from specially prepared mentors appears to have significant impact on building PWHA capacity in self-management and advocacy for self and others.

Next steps: A formal evaluation study comparing the impacts of training only, training and mentoring and mentoring only will allow us to better understand the influence of each component on PWHA outcomes. Replication of this program model in other regions globally is needed.

Presenting author email: jairo@cicatelli.org

WEPE0570
From “home based care” to “home based prevention”: enabling and empowering PLHIV through behavior change
J. Weiss1, K. Yeboah2, V. Aggarwal3
1Project Concern International, Washington, DC, United States, 2Project Concern International, New Delhi, India

Issues: From an epidemiological and public health perspective, PLHIV are an important group to address for effective HIV prevention. A change in the risk behavior of a person with HIV will have a bigger impact on the spread of the virus than the same behavioral change in a person without HIV. The challenge, however, is how to effectively deliver the relevant messages to the PLHIV through meaningful counseling and how to enable them to make informed choices regarding positive prevention.

Methods: This study was conducted to assess sexual behaviour and factors associated with unprotected sex among PLHIV in Nepal. This study was conducted to assess sexual behaviour and factors associated with unprotected sex among PLHIV in Nepal.
WEPE0571
Situating positive (Poz) prevention for gay men and MSM on the continuum of care, treatment and support in Ontario, Canada

M. Jose, M. Hickey
Toronto People with AIDS Foundation, Toronto, Canada

Issues: People living with HIV/AIDS (PLHIV) in Toronto and across Ontario are determined to have full voice in their healthcare and program needs including HIV prevention. Increasing criminalization of transmission and the desire to build a positive prevention driven program builds on the motivation to use HIV/AIDS narratives to create healthy communities and relationships.

Description: Responding to community passion around involving PLHIV in prevention efforts, the Toronto People With AIDS Foundation partnered with the Ontario Gay Men’s Sexual Health Alliance and developed Poz Prevention materials for gay men and MSM and their service providers from a sexual health development perspective. PWA has translated these materials into a Poz peer engagement program, service provider training and various community fora on Poz Prevention.

Lessons learned: Community response was extremely positive for the sexual health materials, information and support that assisted PLHIV in their efforts to make healthy decisions for themselves and others. Peer engagement signed in by the program’s ability to “meet people where they are” and be more effective in providing information, and opportunity to talk and gain support. The value of personal narratives in Poz Prevention efforts became evident as a critical component of connecting with community caring and increasing the intensity and impact of interactions. Several key questions arose related to effectively supporting and ensuring self care for the Peers and recognizing the emotional and social impacts of this work on them.

Next steps: HIV/AIDS narratives have shifted in recent years to broader and more complex considerations of what it means to live healthy, sexual, successful and contributory lives free of stigma and prejudice. While Poz Prevention has become a part of the lexicon, narrative response and continuum of care, treatment and support, within the Ontario AIDS movement, the need for the development of definitions, policy and guideline templates will be further explored.

Presenting author email: mjose@pwatoronto.org

WEPE0572
Finding meaning and purpose in life: the role of spirituality in dealing with the stigma of living with HIV/AIDS people in southern Thailand

O. Baithung1, J. Boddy2
1School of Health and Social Services, Massey University, Palmerston North, New Zealand; 2Faculty of Nursing, Prince of Songkla University, Community Health Nursing, Hatyai, Thailand

Background: Project Concern International (PCI) has incorporated a component of positive prevention into PATHWAY, a community home based care and support project implemented in six high prevalence states in India. Through home-based, individual and couple counseling, PATHWAY promotes safer sex practices and awareness of the importance of enhanced access to ART and OI diagnosis and treatment; partner disclosure and testing of partners; access to ART and maintaining low viral load; and addressing stigma and discrimination. The project also trains PHV as peer educators to promote positive living, conducts outreach, and provides support to additional PLHIV in their community.

Lessons learned: PATHWAY has demonstrated that with the addition of positive prevention elements into its home-based care program, it is possible to maintain a high level of ART adherence (97.5%, as compared to the national average of 78% (INP+ data, 2007)), and reduce HIV transmission (project data shows that 90% of the clients who were discordant remained discordant even after two years). 100% of individuals participating in the PATHWAY project have disclosed their status to their partner.

Next steps: Given the effectiveness of positive prevention strategies in the PATHWAY project, positive prevention must be integrated into other national prevention and treatment programs, in order to support PLHIV in recognizing risk and changing their behavior to halt transmission.

Presenting author email: vkas@pcindia.org

WEPE0573
Living with HIV infection: does it affect global measures of life satisfaction among men?

V.M. Mays1, S.D. Cochran2
1University of California Los Angeles, Psychology, Los Angeles, United States; 2UCLA School of Public Health, Epidemiology, Los Angeles, United States

Background: Research on the effects of HIV infection on quality of life has revealed that higher levels of AIDS stigma and symptoms of physical ill health are associated with lower levels of life satisfaction among HIV infected persons. But none of this work has examined whether men living with HIV infection on average experience a lower quality of life than uninfected men. We investigate this issue using data from a recent sample of HIV men who vary in their sexual orientation and self-reported HIV status.

Methods: The Cal-QOL II survey drew a population-based sample of Californians, age 18 to 72 years including 1,387 men (971 heterosexual; 396 identified). All were administered a structured interview assessing sexual orientation identity, self-reported HIV status, and life satisfaction measured by the 8-item Australian Well Being Index. Multivariate regression methods were used to investigate associations between HIV infection status, sexual orientation and life satisfaction while adjusting for possible confounding due to age, education, family income, ethnicity/race, cohabiting/marital status, and sexual-orientation.

Results: Men who reported a prevalent HIV infection did not differ in their levels of overall life satisfaction from men who did not report an HIV infection after adjusting for confounding (Personal Well Being Index scores: marginal mean=74.8, SE=3.4 vs. marginal mean=76.0, SE=0.6, β=1.22, SE=1.34). Similar comparisons of levels of life satisfaction in 8 specific areas, including health, also revealed no significant differences. Instead, not unsurprisingly, the strongest predictor of satisfaction with one’s current health was age. Presence of a relationship partner was the strongest predictor of overall life satisfaction.

Conclusions: While HIV infection in the United States represents a major chronic health threat for those affected, our findings suggest that quality of life is maintained.

Presenting author email: mays@ucla.edu

WEPE0574
Modifications in the aesthetic subjectivity of seropositive men who are living in an NGO/hostel of Mexico City

C. Torres Cruz, I. Marin Ortiz, J.A. Granados Cosme
Universidad Autonoma Metropolitana, Health Atention, Mexico City, Mexico

Background: The aesthetic as theoretical approach, from the last decade has been studied in some scientific disciplines of the social science as the analysis of the sensibility, it search into the sensitive manifestations of the people about the way they understand life, in that theoretical approach we call all the sensitive manifestations as aesthetic subjectivity, in other words, the aesthetic subjectivity describes the hierarchy of values which people classified their context from the subjectivity. Thus, the objective of this research is to describe the changes in the aesthetic subjectivity of seropositive men living in an NGO/hostel in Mexico City, generated from the process of serocorrection, diagnosis and treatment of the HIV/AIDS.

Methods: The information was gathered by applied participant observation and in-depth interview techniques covering a one year period on 5 seropositive men living in an NGO/hostel in Mexico City. The transcripts of the interviews were processed with Atlas.ti software, the discourse analysis was undertaken by the Grounded Theory methodological approach. The participant observation reports were used to contextualize the collected information from the interviews.

Results: The modifications in the aesthetic subjectivity of the interviewed men were observed in three stages: one comparative analysis, the identification of values concerning to the HIV/AIDS and adaptation to the illness and finally seeking health preservation.

Conclusions: The aesthetic subjectivity at the moment of the diagnosis transforms drastically, it is necessary to understand this transformation to contribute to a positive revaluation and a positive adaptation in regards to the illness, the testimony of the positive people contributes to the elaboration of better strategies to eradicate the stigma against individuals in the early stages of contracting the virus.

Presenting author email: cesartorres11@yahoo.com.mx
WEPE0575
The support jigsaw puzzle - linking and planning the needs of PLHIV of 24 support groups across four provinces in the Rainbow Nation
S. Ncube, S. Mekos
Foundation for Professional Development, Treatment Care and Support, Pretoria, South Africa

**Issues:** Support groups for people living with HIV/AIDS are key in providing support at the community level. However, support groups face considerable challenges including funding and identification of a venue, and needs significant support in order to be sustainable.

**Description:** There are currently 24 support groups at various HIV clinics operated by the Foundation for Professional Development at public health clinics across 4 provinces in South Africa. A survey was conducted to identify the problems and common challenges faced by support groups and develop practical solutions.

**Lessons learned:** The key needs identified were team building activities, access to physical activities and sports, information and training about topics such as physical activity, care and support, mental health, nutrition, and preventive health. Support groups need to be encouraged to develop a sustainable and self-sufficient experience.

**WEPE0576
Inspirational images of people living with HIV (PLHIV) to decrease stigma and promote social and self-acceptance: experiences from India
S. Joseph1, A. Kurian2, G. Kumar2
1Indian Network for People Living with HIV/AIDS (INP+), Chennai, India, 2AIDS Support Organization, Bangalore, India

**Issues:** The stigma associated with HIV positive people is still prevalent in India. There are limited or no photo exhibition of inspirational images of PLHIV undertaken by INP+, with support from FHI/MSF. The book is composed of photographs and case studies documenting the social impact and responses towards photo exhibition of HIV/AIDS in India, highlighting stories of stigma, striving and resilience of those living with HIV/AIDS in India. Many PLHIV also dare to share their stories with the world.

**Description:** Indian Network for People Living with HIV/AIDS (INP+) is the largest national level network of PLHIV with 28 state level networks and more than 260 district level networks and 250,718 PLHIV members. A survey was conducted to identify the positive images of being living with HIV is known to both the general public and people living with HIV. It will also be necessary to create favorable public opinion in addressing the issues and concerns of PLHIV including legal rights, rights and employment.

**Lessons learned:** Indian Network for People Living with HIV/AIDS (INP+) is the largest national level network of PLHIV with 28 state level networks and more than 260 district level networks and 250,718 PLHIV members (48%-women).

**Positive Journey:** The ‘Trumphant Spirit’ is a documentary project (book and photo exhibition) of inspirational images of PLHIV undertaken by INP+, with support from FHI/MSF. The book is composed of photographs and case studies documenting the social impact and responses towards photo exhibition of HIV/AIDS in India, highlighting stories of stigma, striving and resilience of those living with HIV/AIDS in India. Many PLHIV also dare to share their stories with the world.

**Lessons learned:** The ‘Trumphant Spirit’ is a documentary project (book and photo exhibition) of inspirational images of PLHIV undertaken by INP+, with support from FHI/MSF. The book is composed of photographs and case studies documenting the social impact and responses towards photo exhibition of HIV/AIDS in India, highlighting stories of stigma, striving and resilience of those living with HIV/AIDS in India. Many PLHIV also dare to share their stories with the world.

**Next steps:** Photo Exhibition will be opened all over the country. The book will be disseminated to various sectors to reduce stigma/discrimination. Both will reach millions of people in the country to create an enabling environment.

**Presenting author email:** shaunmf@foundation.co.za

WEPE0577
Supporting community caregivers in home-based care and support for PLHIV in Irkutsk, Russian Federation
A. Latishken1, M. Akulova1, R. Bahrambegi2
1Russian Red Cross, Irkutsk Regional Branch, HIV/AIDS Programs, Irkutsk, Russia, 2Russian Red Cross, Moscow, Russian Federation

**Issues:** In Russia, communities are more likely to stigmatize PLHIV rather than accept them as equals. Many family members are ill-equipped to cope with the range of needs loved ones with HIV. Stress, burn out, lack of coping skills, and discrimination about how the virus spreads is common among caregivers. According to the Irkutsk regional branch of the Russian Red Cross (IRC), the majority of HIV-positive clients referred to the branch for counseling have not disclosed their HIV status to family or close surroundings.

**Description:** In 2007, IRC established the Family Health Center (FHC) with support from the American Red Cross (ARC). Specialists from the Center, which include psychologists, nurses and social workers, support caregivers and other family members by providing families of PLHIV with counseling services, including care of PLHIV, adherence to ARVs, coping mechanisms and relations with PLHIV. Moreover, FHC specialists focus on the needs of HIV-positive parents, including counseling and support on monitoring the health and development of their children. Families of HIV/AIDS and HIV/AIDS-affected children in the FHC serve as a unique resource center which provides confidential counseling services for families affected by HIV in a welcoming and non-judgmental environment. Many PLHIV also report that services at FHC have helped them disclose their status to loved ones.

**Next steps:** RRC in collaboration with ARC is scaling up and replicating lessons learned from this experience in Irkutsk to other Russian regions where RRC provides care and support for PLHIV and their caregivers.

**Presenting author email:** hvivk@mail.ru

WEPE0578
Problems associated with counseling HIV discordant couples - an experience of Kitovu Mobile AIDS Organization
S. Amos Namala1, J. Gwokya2
1Kitovu Mobile AIDS Organization, Orphans & Family Support, Kampala, Uganda, 2Kitovu Mobile AIDS Organization, Counseling & Training, Masaka, Uganda

**Issues:** Many new challenges are occurring with in HIV discordant couples (in which one partner is HIV infected and the other partner is HIV negative). In some couples where a male partner is HIV-positive, there is only 50:50 chance that the other will be HIV-negative as well. Couple counseling is therefore very vital for support supervision in families.

**Description:** Kitovu Mobile has been involved in couple counseling for the last 5 years since the inception of ARVs in the organization. Many marriages break up especially cases of women being positive and men negative. Women can be allowed to stay and look after children and nurse a husband if they are negative. But in situations where men are negative and women positive, it is a direct expulsion from their homes. They are accused of committing adultery and cursed for bringing the virus. With the intervention of Kitovu Mobile, it has been realized that in the process of counseling they may hold the partner and expose the disease.

**Lessons learned:** Counseling HIV discordant couples is a key element in determining family destiny. There is increased knowledge and awareness among HIV discordant couples due to counseling. Sharing personal testimonies to the rest of married couples at community meetings, in media (Electronic & Print), has been a success resulting to psychosocial support and counseling individuals and family.

**Next steps:** Kitovu Mobile is going to empower and facilitate HIV discordant couples to form drama clubs and further train members to provide psychosocial support, promote male involvement, couple communication and couple testing.

**Presenting author email:** amosnamala@yahoo.co.uk

WEPE0579
The Ukrainian experience of HIV-status disclosure to the child
O. Vynogradova1, B. Bryzhyval2, O. Dudina1, O. Gvozdetska1, T. White2
1All-Ukrainian Network of People Living with HIV/AIDS, Program Department, Kyiv, Ukraine, 2All-Ukrainian Network of People Living with HIV/AIDS, London, United Kingdom

**Issues:** HIV diagnosis disclosure (DD) is a topical issue for professionals who provide care and support of children infected and affected by HIV. DD helps children cope with the disease, increase their adherence and compliance to ARV treatment. It also integrates their diagnosis into their lives so as to be able to make plans for the future. So far there is no comprehensive methodology on this issue in Ukraine.

**Description:** The 5-year “Children Plus” project (2008-2013) provides socially-psychological support to children aged 6-16 and their families during staged process of HIV status disclosure in ten regions of Ukraine. This activity is implemented in a partnership with the Ukrainian Angel Appeal Foundation (RAA). RAA’s methodology on DD to HIV+ children was adapted to the Ukrainian context. Ten multidisciplinary teams of social workers, psychologists, and paediatricians from AIDS centres were trained. DD includes primary consultations; parent’s and child’s evaluation on their readiness to disclosure; psychological support of DD; disclosure to the family; during and after DD; self-support groups for parents; clubs for children, etc.

**Lessons learned:** During DD we found that due to the disparate ways of HIV transmission between Romania (mostly by blood transfusion) and Ukraine (in majority vertical transmission) our clients’ needs are different from Romanian. Hereby, we extended our target groups and currently also disclose HIV status of HIV+ family members to HIV negative children as well as DD to HIV+ orphans living at state institutions.

**Presenting author email:** amoramphilinks@gmail.com
**WEPE0582**

**Oaxaca Mexican women with HIV/AIDS: resiliency in the face of poverty, stigma, and isolation**

C. Holm, R. Sewell, G. Velasquez1, V. Hernandez Alonso1

Kennesaw State University, College of Health and Human Services, Kennesaw, United States, 1Kennesaw State University, College of Health and Human Services, Kennesaw, United States, COESIDA, Health Department for the State of Oaxaca, Oaxaca, Mexico

Issues: HIV infection among Mexican women continues to increase in remote rural areas. Women having little prevention knowledge and/or control become infected. Often diagnosed with HIV/AIDS during a husband’s illness or their pregnancy, they have very limited resources. They are stigmatized, demonized, and ostracized by their community members. This study’s purpose was to explore the psychosocial issues faced by rural HIV-positive Oaxacan women, to determine their illness management and needed mental health support services.

Description: This exploratory study used in-depth face-to-face interviews with 21 women receiving health services at the HIV/AIDS clinic, COESIDA, near Oaxaca City, Mexico. A Spanish speaking researcher conducted audio-taped interviews in a private COESIDA clinic room, using a semi-structured interview guide, allowing women to tell their stories. Socio-demographic characteristics were collected. Audio-taped interviews were transcribed verbatim and translated into English. Transcribed interviews were analyzed using content analysis identifying themes that were consistent across the interviews. Interviews were conducted independently by two researchers comparing results and resolving interpretation variations.

Lessons learned: Themes ranged from social isolation, 1) Social Isolation; 2) Fear; 3) Anger/rage; 4) Lack of Resources/Support; and 5) Resilience.

Next steps: Poor rural Mexican women represent a vulnerable group dealing with HIV/AIDS, having few resources to cope with HIV/AIDS except support provided by COESIDA. Many women acknowledged gratefulness for a first-time opportunity to discuss their feelings and fears, indicating a great need for psychological support and mental health services to support their inherent resilience and manage their lives with HIV/AIDS.

Presenting author email: chatol@kennesaw.edu

**WEPE0583**

**Increasing service uptake of ‘prevention of mother-to-child transmission’ (PMTCT) through one - on - model of care, treatment and support provided by successful PMTCT mothers for pregnant HIV+ women in Uganda**

M.C. Bertsch, A.A. Apea

National Community of Women Living with HIV/AIDS (NACWOLA) in Uganda, Programs, Kampala, Uganda

Issues: Close to 30,000 children are born HIV+ annually in Uganda (HEPS, 2008). At 21 %, MTCT is the second largest mode of HIV transmission after sexual intercourse. MTCT programs in Uganda are facing challenges as a significant number of pregnant women do not access preventive treatment to protect their children against HIV transmission. Poor quality of counselling, expectant mothers not delivering in health facilities, and husbands who do not give adequate support, contribute to the failure of reducing the rate of MTCT.

Description: NACWOLA increases PMTCT service uptake in 4 districts of Uganda through a 1-on-1 innovative approach aimed at generating demand within households for quality services at their doorsteps. Through community channels and communication, families become the pull for services, instead of simple beneficiaries. The approach uses former PMTCT mothers’ testimonies to mobilise, refer and follow-up families with PMTCT support through door-to-door, woman-to-woman, man-to-man and mentor mother communication.

Lessons learned: Together, these strategies have proven to reduce stigma, enable families to gain awareness, obtain peer support and freely access services. Linking communities and mentor mothers to public health facilities with PMTCT services enforces regular ante-natal care visits, delivery in health centres are critical for sustained success in the country.

Presenting author email: mayabertsch@nacwola.or.ug

**WEPE0584**

**Living with HIV/AIDS (WLHA) as a key resource to increase access to care, treatment and support for people living with HIV/AIDS (PLHA) in Uganda**

M.C. Bertsch, A.A. Apea

National Community of Women Living with HIV/AIDS (NACWOLA) in Uganda, Programs, Kampala, Uganda

Issues: As part of the ‘National HIVB/AIDS Strategy’, the Uganda AIDS Commission measures involvement of PLHA in positive prevention. PLHA can contribute vitally not only to positive prevention, but also to improve service delivery especially in rural areas where health-facility based services are lacking and the burden of HIV care and support falls predominantly upon families and communities.

Presenting author email: mayabertsch@nacwola.or.ug
WEPE0585

Limitations of the Karnofsky performance status for assessing functional capacity of PLHIV in Uganda

N. Kyomoge1, K. Kiellmann1, A. Grant1
1London School of Hygiene & Tropical Medicine, Public Health and Policy, London, United Kingdom; 2London School of Hygiene & Tropical Medicine, Infectious and Tropical Diseases, London, United Kingdom

Background: As part of clinical management, the Karnofsky Performance Status (KPS) scale is used for assessing HIV patients' functional capacity including in low-income settings. It is however unclear whether this measure reflects the social, cultural and economic factors that shape the scope and value of everyday activities that are the basis of this assessment.

Methods: In the context of a study examining the effects of ART on individual functioning and household productivity, 79 clients (20 male, 59 female) of The AIDS Support Organisation (TASO), Uganda, completed a questionnaire which, in addition to socioeconomic and demographic data, assessed their functioning using the KPS scale definitions rating (%) criteria. Individuals were also asked to self-define their 'normal' activities. Twelve (2 male, 10 female) of these clients were then interviewed with a semi-structured instrument that explored factors in functional capacity affected their everyday activities and how these were experienced and valued by them and their households.

Results: Participants ranged in age from 36-54 years. Their income generation and daily maintenance activities involved a significant degree of physical exertion. The qualitative instrument revealed that in the absence of welfare provisions, substitute household labour or other financial or in-kind support, people often had no choice but to conduct those physical activities that were necessary for their lives and livelihoods. Consequently, their KPS levels were routinely assessed as higher than they might have been were they able to avoid certain activities. This was particularly so for women who were unable to avoid activities such as growing, buying and preparing food and looking after young children.

Conclusions: The KPS, although useful as a rough assessment of individual's functional capacity, may be ill-suited for use in a low-income setting, where sick individuals may not have either the resources or the support to temporarily relieve them of key household functions.

Presenting author email: nambusi.kyomoge@lshtm.ac.uk

WEPE0586

Client management for HIV-infected children and their families in Osh region of Kyrgyz Republic: problems and opportunities

G. Lur, HIV-positive Children AIDS Foundation East-West, Bishkek, Kyrgyzstan

Issues: In 2007 in Osh region of the Kyrgyz Republic the HIV nosocomial pe- diatric outbreak was identified. Between 11 January 2007 and 10 May 2007 in the city of Osh 510 cases of HIV infection were registered cumulatively, including 156 cases among children. Families affected by HIV infection suffer from lack of information on HIV/AIDS, uncertainty about the future, stigma and discrimination from the nearest environment - neighbors and relatives.

Description: The "Social support of the families affected by HIV in Osh region of Kyrgyz Republic" project was started in June 2008. The project is supported by AIDS Foundation East-West and UNICEF. The project aims to assist children with HIV infection in obtaining medical, social and psychological support through client management approach. The Social Bureau providing client management has established partner relations with many organizations including medical and social ones to ensure getting services required. Some examples of these are: the client management at Social Bureau providing children with access to the National Health System, support for buying medicines, organizing holidays, children’s concerts, Christmas. Other types of assistance included: social support for parents of HIV-positive children. By January 2010, 43 families with HIV-positive children have been supported by the Social Bureau. These families have constantly being assisted in the provi- sion of supplementary food, in receiving of social benefits, medical care and medicines. 40 members of psychological mutual aid group were conducted weekly meetings.

Lessons learned: The biggest problem remains self-stigma of parents, which leads to denial of HIV status, and after that respective treatment and care for the child. This event has allowed informing other families in the area about the necessity of afternoon of different tasks. Parental involvement has allowed informing other families in the area about the necessity of afternoon of different tasks. Parental involvement allows solving problem of HIV-positive children's families and their children to plan for their future and play a more active role in their community.

Presenting author email: edueustache@aol.com
WEPE0589
Life with a HIV-infection. Personal experience of HIV-infected women as a form of assistance to people living with AIDS
E. Kraksboj, J. Haff, O. Stetsuyik
Copenhagen University Hospital, Rigshospitalet, Infectious Diseases, Copenhagen, Denmark
One of the current trends of an epidemiological process in Russia is the spread of sexual way of infection, that primarily is characteristic of female population. There is a significant increase in the number of women infected through sexual way. The shortage of development medical, socially-psychological and other kinds of the help corresponding to specific requirements of this subgroup of HIV-infected of people. There is a group of mutual aid “Olivia” In St. Petersburg since 2003. This group unites women infected through a sexual way and without drug dependence.

The major result of participation in group work is comprehension by its participants of possibility of use of this help as a chance for self-realisation. The form of the work, allowing to carry out this possibility, is granting of certificates, i.e. an essay in which the experience of residing of illness is described and analyzed.

The desire to bring the contribution to the process of help to HIV-infected people stimulated participation in a need of development medical, socially-psychological and other help corresponding to specific requirements of this subgroup of HIV-infected of people. There is a group of mutual aid “Olivia” in St. Petersburg since 2003. This group unites women infected through a sexual way and without drug dependence.

WEPE0590
Travel patterns and attitudes of Danish HIV-infected individuals
C.S. Larsen1, U.S. Nielsen2, S. Jensen-Fangel3, N. Lohse1, N. Obe1
Aarhus University Hospital, Skeby Sygehus, Infectious Diseases, Aarhus N, Denmark, 2Copenhagen University Hospital, Rigshospital, Infectious Diseases, Copenhagen, Denmark
Background:Higher susceptibility to infections, impaired response to immuno-suppression, and potential difficulties of obtaining travel insurance, and widespread discrimination and travel bans impact on lifestyle of HIV-infected people. The study aims to make it important for persons living with HIV to obtain advice before travelling abroad. We aimed to describe travel patterns, pre-travel advice and health problems during travel among Danes with HIV.

Methods: From November 2008 to April 2009 a questionnaire was given to patients at all outpatient HIV clinics in Denmark.

Results: 763 individuals responded; 83% men. 18% travelled less than before the HIV-diagnosis, and another 30% were more cautious when choosing destination. During the previous two years 375 had travelled outside Europe: 78.7% for less than four weeks, 71% for holiday, and 28% to visit friends and relatives. Nearly all the HIV-infected of group to prepare texts in which the experience of residing of illness is described and analyzed.

The desire to bring the contribution to the process of help to HIV-infected people stimulated participation in need of development medical, socially-psychological and other help corresponding to specific requirements of this subgroup of HIV-infected of people. There is a group of mutual aid “Olivia” in St. Petersburg since 2003. This group unites women infected through a sexual way and without drug dependence.

WEPE0591
Immigrant women’s group: providing social support and transition to HIV-positive immigrant women facing stigma and isolation in Calgary, Alberta, Canada. Based out of the Southern Alberta HIV Clinic, this is the only group designed to succor increasing population
C. Carrillo, N. Marshall
Alberta Health Services, Southern Alberta Clinic, Calgary, Canada
Issues: At the Southern Alberta HIV Clinic in Calgary, Canada, immigrant women comprise 15% of the patient population. During routine clinic visits for HIV care, we identified patterns of stigma, fear, social isolation and difficulty coping amongst these women.

Description: In January 2007, the Southern Alberta Clinic created the Immigrant Women’s Support Group. A Registered Nurse and a Social Worker facilitated informal, monthly meetings. Participants recruited in person, through posters displayed at the clinic were from African countries. Meetings held in the clinic were theme or issue focused. Group discussions were planned to engage the participants. Initially, meetings focused on HIV education but as the group evolved, so did the focus. Currently the group is primarily a social mechanism where women can share their personal stories and experiences.

Lessons learned: Processes and texts were developed to engage the participants. Group meetings encourage new attendees to include, providing consistent childcare; incorporate cooking and other social interventions.

WEPE0592
Lessons learned from implementing the meaningful involvement of PLWHAs in a community in Nigeria: an effective tool for reducing stigma and discrimination
C. Ekik, B. Ofudje, O. Oforum
Society for Family Health, Field Operations, Owerri, Nigeria
Issues: Stigma and discrimination associated with HIV and AIDS contributes to self-pity, low self-esteem, and self-stigma among people living with HIV/AIDS (PLWHAs), especially when exhibited by friends, relatives or community members. This paper addresses how a programme was designed to increase the involvement of PLWHAs and how this contributed to reduce stigma and discrimination.

Description: Society for Family Health implemented a programme titled ‘Meaningful Involvement of PLWHAs’. This was aimed at reducing discrimination and improving quality of life for PLWHAs in and around intervention areas. It involved working with PLWHAs to encourage positive lifestyles and healthy living practices. Two PLWHAs from two support groups in Imo and Abia states in South East Nigeria were selected and trained to provide accurate health information on nutrition, positive living and intervention of opportunistic infections using inter-personal communication. In addition, basic care kits were distributed, each containing an insecticide treated net, a sodium hypochlorite solution, a bucket and IEC materials. Education for PLWHAs targeted HIV/AIDS, sexual and reproductive health and home-based care. This intervention was evaluated through Participatory Monitoring and Evaluation meetings.

Lessons learned: The intervention led to formation of new support groups within communities where the programme was implemented. Self-esteem of PLWHAs was improved with one persons being appointed as an executive of state network of PLWHAs. In addition, findings revealed that positive living had a significant impact on community attitudes towards PLWHAs: Persons living with HIV can openly declare their status without any fear of intimidation or being ostracised.

Next steps: The programme was able to ensure the integration of care and support activities within the community. Engaging and involving PLWHAs directly in HIV prevention programmes can have a significant impact on stigma and discrimination against PLWHAs.

WEPE0593
Improved model for stigma reduction through PLHIV and livelihoods development
M. Varavaldya1, U. Hontmawe1, R.C. Wolf2, P. Rumakom3, P. Ucharatna1, G. Orangsa-Aubayhay2
1Population and Community Development Association, Bangkok, Thailand, 2U.S. Agency for International Development (USAID), Bangkok, Thailand, 3Thai British Educational Services, Bangkok, Thailand
Issues: HIV-stigma/discrimination remains a barrier to prevention and care efforts, increasing PLHIV’s vulnerability and lessening chances of accessing microfinance services.

Description: In 2008, with Pact’s support, USAID initiated the Positive Partnership Program Phase II in six provinces, aimed at increasing quality of life (QoL) of PLHIV, and reducing HIV-related stigma. The program pairs PLHIV with HIV-negative partners/buddies, providing them with business trainings and loans. Health education and anti-stigma activities in communities where loan pairs live are critical components. Village banks and support groups of program participants are trained to manage loans, savings and program activities.

A baseline survey assessing HIV knowledge and stigma was conducted with 415 community members, 198 family members of pairs, and 105 buddies. Baseline data was collected with 107 PLHIV on stigma, and QoL. Results revealed the need to emphasize anti-stigma activities with program participants and communities.

A mid-term survey conducted in 2009 with PLHIV showed significant increases in PLHIV’s QoL and self-confidence. Qualitative data revealed reduction in PLHIV’s dependency on high-interest, black-market loans.

Lessons learned: Baseline results show that both PLHIV and community respon- dents correlated with low HIV knowledge. PLHIV’s internalized stigma hinders their engagement in program activities. Addressing these challenges, PLHIV are implementing systemic education and training, and providing PLHIV, buddies and community leaders to advocate for PLHIV. HIV-positive staff of village banks and support groups provided support to and encouraged PLHIV to use services.
WEPE0595

The secret about seropositivity in the context of the lives of people followed at a reference service on HIV/AIDS in Belo Horizonte, Brazil

W.J. Santos1, F.M.C. Silva2, E.F. Drumond3, A.S. Gomes1, M.F.P. Freitas3

1Universidade Federal de Minas Gerais, Escola de Enfermagem, Belo Horizonte, Brazil; 2Secretaria Municipal de Saúde de Belo Horizonte, Belo Horizonte, Brazil

Background: Psychosocial aspects in reference to working relations, relationships with partners, family, and friends influence adherence to antiretroviral therapy (ART). In Brazil, the family is the basis for the care of chronically ill patients. People living with HIV/AIDS likewise appeal to relatives in situations of need. Some keep the diagnosis secret, thus restricting relationships support, which can lead to lower treatment adherence. This study is part of a research on ART adherence in a reference HIV/AIDS outpatient clinic.

Objectives: To analyze the insertion of the secret about seropositivity in the treatment of people infected with HIV.

Methods: Qualitative research carried out at a public health service in Belo Horizonte, Brazil, with 24 in-depth interviews of people aged over 18y, in ART for at least 2 years, who gave their free informed consent. Topics included sharing of information on seropositivity, and ways of hiding it. Interviews were recorded, transcribed and analyzed by means of Structural Analysis of Narratives.

Results: Some interviewees chose a family member considered “trustworthy”, or someone distant to share the diagnosis, in search of support. Some told no one, desiring to avoid suffering and for fear of discrimination. Talking is considered difficult and there are things left unsaid in order not to “open the wound”. Exchanges are restricted to the objectivity of the treatment. Those who keep the secret also fail to take part in support groups, talking only to healthcare professionals. The social networks are practically nonexistent for the non-adherent and slightly less fragile for the adherent.

Conclusions: The secret expresses a strong feeling of insecurity. Solitude and shallow communication are the basis for interactions, pointing to the need for interventions by health services and the State in order to involve other characters besides relatives and to provide places for effective psychosocial support.

Presenting author email: peninha.bh@eterna.com.br

WEPE0596

Quality of life improves after HIV diagnosis, but ART is not the cause: a multicentre longitudinal study in Kenya and Uganda


‘King’s College London, Department of Palliative Care, Policy and Rehabilitation, London, United Kingdom; ’London School of Hygiene & Tropical Medicine, Mwana, Tanzania, United Republic of, ’African Palliative Care Association, Kampala, Uganda, ’African Palliative Care Association, Nairobi, Kenya, ’Kenya Hospices and Palliative Care Association, Nairobi, Kenya

Background: A systematic review suggests that very little evidence exists regarding the quality of life (QoL) of those newly diagnosed with HIV. Studies have shown improved quality of life following ART initiation in sub-Saharan Africa, but a causal relationship is unproven. We aimed to measure QoL prospectively from HIV diagnosis and entry into care.

Methods: In Uganda and Kenya, 457 adults were recruited within 14 days of testing HIV-positive at 11 outpatient centres. These centres provided multidisciplinary care including symptom management, social support, counselling and ART. Participants completed the 35-item MOS-HIV four times at monthly intervals. ART use was defined as ‘used every month’, ‘never used’ and ‘sometimes used’ (at least one month but less than four). The physical (PHS) and mental health (MHS) summary scores were calculated and multilevel mixed-effects linear regression was used to fit a model.

Results: Participants were 61% female; mean age was 36 (males) and 31 (females); 175 reported taking ART every month, 176 never, and 106 sometimes. At baseline, MHS was positively associated with age (p=0.03) and socio-economic quintile (p<0.01). PHS was positively associated with socio-economic quintile (p<0.01) and female gender (p=0.02), negatively with ART use (p<0.01). Over time, outcomes improved significantly. Neither outcome was longitudinally associated with age, gender or ART use, but change in PHS was associated with socioeconomic quintile (p<0.03).

Conclusions: People with HIV experience poor QoL at diagnosis and rapid improvement over three months. The gain is not associated with receipt of ART and is more likely to be a consequence of the multidimensional care received. These findings imply that QoL increases following ART may in fact be caused by accompanying care services such as symptom management and counselling. Evidence of effectiveness of HIV supportive care from diagnosis is needed.

Presenting author email: vicky.siminyu@kcl.ac.uk

WEPE0597

Palliative care problems at HIV diagnosis are severe and under-researched: a systematic review

V. Siminyu, R. Harding, T.J. Higginson

King’s College London, Department of Palliative Care, Policy and Rehabilitation, London, United Kingdom

Background: The WHO identifies palliative care (holistic patient-centred care comprising management of physical, psychological, social and spiritual problems in life-limiting illness) as an essential component of HIV care from the point of diagnosis onwards. Research on the immediate post-diagnosis period is limited and much of it suffers from biases of selection and recall. A systematic review was conducted to describe multidimensional problems in the first months after diagnosis.

Methods: The search strategy employed seven keywords that are commonly used to describe the core dimensions of palliative care. Four databases were searched and inclusion criteria stipulated original papers in English describing outcomes collected during the first six months following HIV diagnosis in adults (aged 18 and over). Data were extracted into a table, and evidence was graded on quality criteria.

Results: Of the 5443 titles screened, 33 papers met the inclusion criteria. The sample comprised 148 women in eight studies and patients with recent seroconversion in five. The review found high prevalence of problems in the domains of pain (11-55%), symptoms such as diarrhoea (12-79%), psychological symptoms (depression 11-43%), loss of wellbeing (e.g. unhappy most of the time 64%), lack of emotional support (not disclosed status 10-21%), and need for practical support (restricted work 16-54%). Two qualitative studies revealed the importance of spiritual care for patients. More severe problems were found in developing countries, and also experienced by injection drug users. Fewer studies measured psychosocial and spiritual needs than physical symptoms. Methodological quality was variable.

Conclusions: Very little evidence exists regarding the experience of HIV diagnosis, and both reliability and generalisability are often poor. Working assumptions regarding problems at diagnosis may lack adequate supporting evidence. The literature reveals a high prevalence of multidimensional problems of unknown intensity, duration and cause. More research is needed to inform palliative care provision at diagnosis.

Presenting author email: vicky.siminyu@kcl.ac.uk
WEPE0600
QOL and socioeconomic background of people living with HIV: a nationwide survey in Japan

C. Wakabayashi1, Y. Ikushima2, T. Otsuki2

1Saitama Prefectural University, Health Sciences, Saitama, Japan, 2Place Tokyo, Tokyo, Japan

Objective: In Japan, an increasing number of new cases of PLWH is still being reported every year. There is deep-rooted social prejudice and stigma against PLWH and it makes employment and living in local communities uncomfortable for PLWH. We carried out a nationwide survey of PLWH to clarify the current issues regarding the quality and difficulties of social life and the socioeconomic background behind the issues.

Methods: Anonymous survey forms for 1813 PLWH were distributed to 33 hospitals with AIDS care facilities all over Japan in 2009, and 1203 responses (66.4%) were returned via mail.

Results:
1. 94% were men, the mean age was 42.3 ± 11.0 years, 83% were infected via sexual transmission, 28% had AIDS.
2. 60% lived alone and 17% lived with spouses, employment rate was 79%, and 7% were receiving welfare.
3. At the time the HIV infection was detected, the unemployment rate was 7%, which increased to 21% at the time of the survey. Forty-five percent of the respondents considered leaving their jobs after they were found to be infected, and 37% had actually changed jobs.

Conclusions: Japanese PLWH face a variety of difficulties in society, especially regarding privacy in the workplace. The Japanese government and industries should actively implement measures to address these difficulties.

Presenting author email: wakabayashispu.ac.jp

WEPE0598
Serodiscordant couples workshops: psychological support, counseling and capacity building

M.V. Zalazar1, M. Flighelman2, R. Pemoff3

1Fundacion Huesped, Epidemiology and Prevention, Buenos Aires, Argentina, 2Fundacion Huesped, Buenos Aires, Argentina

Issues: Over the last decades, serodiscordant couples have faced a number of challenges: safe sex measures, medical treatments, therapies, mutual support and hope, but also new challenges for their intimacy and family planning. An approach to these factors is substantial for those couples where both members face a relevant problem not related only to the epidemic of the HIV/AIDS but also to the relationship itself.

Description: One of the primary assistance that help serodiscordant couples to confront their difficulties is the professional psychological support, based on a workshop strategy, where psychologists help the groups to share experiences and reflections that allow them to disclose different problems related to their special situation.

Lessons learned: Although members of the groups referred to know and use always condoms, practical difficulties are not often recognized in the medical consultation. The peer group appears a secure and prejudice free environment where members of the couple are able to express practical difficulties and errors in the implementation of prevention methods. Couples can see others in the same situation and change their believes about being the only ones who share this problem. Hearing experiences with peers facilitates dialogue within the same situation and change their believes about being the only ones who share this problem. Hearing experiences with peers facilitates dialogue within the same situation and change their believes about being the only ones who share this problem. Hearing experiences with peers facilitates dialogue within the same situation and change their believes about being the only ones who share this problem. Hearing experiences with peers facilitates dialogue within the same situation and change their believes about being the only ones who share this problem.

Next steps: Couples are always invited to participate on these workshops at Fundacion Huesped and there is a growing demand for this kind of assistance. We are looking for the continuity and replication of this group, a research activity and documentation that is not being done appropriately and the possibility of training other psychologists that could replicate this strategy with other groups of couples throughout the country.

Presenting author email: virginia.zalazar@huesped.org.ar

WEPE0599
Seropositivity: social identity, disclosure and vulnerability

WEPE0601
Discourses on sexual responsibility in a group of MSM living with HIV in Spain

P. Fernández Dávila1, A. Morales Carmona1, K. Zaragoza Loca1

1Sapi Sida, Research Unit, Barcelona, Spain, 2Universitat Ramon Llull, Faculty of Psychology, Physical and Educational Sciences Blanquerna, Barcelona, Spain

Background: To describe and understand the discourses on sexual care and responsibility in a group of men who have sex with men (MSM) living with HIV.

Methods: A qualitative study was carried out with 78 men (27-65 ages): 35 individual interviews and 43 in 5 discussion groups, in the cities of Barcelona, Madrid and Palma de Mallorca. The sampling criteria was that eighteen months had passed after a HIV diagnosis was established.

Results: Three distinct discourses about sexual responsibility were observed:
1. Unique responsibility: the HIV-positive man is who should protect himself in order to protect others. This discourse is based on an ethical positioning (altruistic), in which the duty and obligation to protect others is a priority.
2. Shared responsibility: both parties agrees and/or consent to have a sexual risk practice although those who tend to use this discourse ultimately assume, in practice, the entire responsibility, and
3. Self-responsibility: individualistic approach, each cares of himself, although the type of emotional bond with others may affect the decision to care or not (there is some commitment to protect someone when it is felt something for that person).

Conclusions: A better understanding of the discourses around responsibility could help us to shape the type and contents of interventions aimed at HIV-positive MSM. This could increase the effectiveness of HIV prevention programs. However, it is necessary to know more about the relationship between discourses of responsibility and behaviour as well as emotional state and stress within a sexual relationship as possible outcomes of the burden associated with that responsibility.

Presenting author email: percy@stapsida.org

WEPE0602
To disclose or not to disclose? The factors influencing HIV disclosure among African and Caribbean women

M. Methunzi1, W. Tharo2, M. Mekhes3, R. Njeri3, M. Ndungu1, P. Howe1, R. Fishband2, S. Kindy-McPherson1, S. A. Arigbe1

1Women’s Health in Women’s Hands, Community Health Centre, Toronto, Canada, 2York University, Toronto, Canada, 3Black Coalition for AIDS Prevention, Toronto, Canada, 4Africans in Partnership against AIDS, Toronto, Canada, 5Voices of Positive Women, Toronto, Canada, 6Toronto People with AIDS Foundation, Toronto, Canada, 7The Teresa Group, Toronto, Canada, 8Casey House Hospice, Toronto, Canada

Background: The disproportionate incidence of HIV infection among women from the African and Caribbean Diaspora creates complex social, cultural, and economic challenges. Disclosure of an HIV-positive status represents an important step in addressing these obstacles, accessing support services and avoiding legal prosecution. While public health interventions can provide women with support and guidance, a culturally appropriate and gender-spe
cific understanding of the factors influencing disclosure is critical to effective implementation. We present the findings of a community-based study that examined factors influencing HIV disclosure among African and Caribbean women in Toronto, Canada.

Methods:
1) The literature was reviewed to identify relevant HIV disclosure studies and models.
2) Focus groups were conducted with HIV-positive African and Caribbean women, who self-identified as being at various stages of the disclosure process. The focus group providers were also members of a bar-based group sessions.
3) Key-informant interviews were conducted with four women from different African countries.
4) Interviews and focus groups were recorded, transcribed and analyzed using relevant theoretical frameworks.

Results: Findings suggest that a number of factors influence how HIV-positive women negotiate the disclosure process, including: education; empowerment; mentor and self-acceptance; internal and external sources of stigma; support systems; treatment and disease progression; violence and safety; legal and ethical issues; and spirituality.

Conclusions: African and Caribbean women face a number of unique challenges when contemplating disclosure to their partners, children, family members, and service providers. The purpose of this investigation was to provide insights into the development of a culturally appropriate and adaptable HIV disclosure intervention. However, these findings are also useful to practitioners and support workers seeking to develop effective public health responses that support women contemplating disclosure, while addressing secondary transmission and criminalization issues.

Presenting author email: m.muchenje@yahoo.com

WEPE0603
Prejudice, secrecy and long term adherence to HIV therapy in Burkina Faso

G. Tiendrebeogo1, A. Hardon1, M.E. Beleni1, R.G. Compaore1, A. Sissibe2, B. Lamontagne3, N. Ouangraoua3, I. Kabore3, S. Traore3, D. Ouedraogo1, H. Kangamba1
1Royal Tropical Institute, Development, Policy and Practice, Heemstede, Netherlands, 2University of Amsterdam, Amsterdam School for Social Science Research, Amsterdam, Netherlands, 3Royal Tropical Institute, Development, Policy and Practice, Amsterdam, Netherlands

Issues: Long term adherence is critical to antiretroviral treatment. Although significant progress has been made toward better access to ARVs, data suggest levels of adherence are modest. In particular, treatment loss in Burkina Faso is linked to the long wait for treatment of patients in the two major cities of Burkina Faso. Subsequently, to contextualize with the changing policy environment, we held focus group discussions with people on treatment for less than 6 months or ARV-naive; people on treatment for more than 6 years; decision makers and NGO leaders; traditional healers; and representatives of networks of people living with HIV.

Lessons learned: People on antiretroviral treatment experience moral, cultural and structural prejudice in their everyday lives, which leads to non acceptance of the condition, persistent feeling of shame, lack of disclosure, and subsequently to non adherence. Secrecy and concealment account for the most effective strategies in performing the simple task of executing the regimen on the daily basis. Yet same tactics when and where not feasible, constrain the ability to maintain long term adherence (persistence). The enduring stigma and prejudice towards people living with HIV lead many to make difficult decisions to hide their pill taking, thus further contributing to non-adherence to antiretroviral treatment. Alongside with scaling up access to ARVs, the provision of treatment literacy and psychological counseling there is also a need to address more efficiently intol-erance, moral, cultural and social intolerance that reinforces suffering among people living with antiretroviral treatment.

Presenting author email: g.tiendrebeogo@online.nl

WEPE0604
The process of HIV status disclosure to HIV-positive children: experiences from Lilongwe, Malawi

L. Hinson1, A. Cornell1, L. Parker2, M. Kim3, C. Cox4, P. Kazembe2, T. Gamble2
1Family Health International, Behavioral and Biomedical Research, Research Triangle Park, United States, 2University of North Carolina at Chapel Hill, Chapel Hill, United States, 3Baylor College of Medicine, Houston, United States, 4University of North Carolina Gillings School of Global Public Health, Chapel Hill, United States

Background: Baylor College of Medicine Abbott Fund Children’s Clinical Centre of Excellence-Malawi, Lilongwe, Malawi

Issues: Most parents/caregivers and HCPs reported that disclosure was and should be a gradual process. HCPs and parents/caregivers were both instru-

mental; often, HCPs provided initial disclosure at the clinic and parents/care-
givers continued the discussion at home. This combination was believed to be the ideal for disclosing to children. However, we know that how and best to disclose and parents/caregivers know the child best and have the responsibility to the child’s autonomy. Disclosure was influenced by maturity level; sexual debut; ability to comprehend status signifi cance; and questions being asked by the child about hospital visits and medication. Confidentiality was a primary concern to parents/caregivers; a fear that their child would tell their status to others in the community. HCPs were perceived as secret keepers and reviewed by parents/caregivers and children.

Conclusions: Disclosure of an HIV diagnosis to children should be gradual and involve both a health care professional and the child’s parent/caregiver. Timing of disclosure may not be linked to a specific age but rather other individual- level factors. HCP should continue to be attentive to issues of confidentiality.

Presenting author email: tgamble@fihi.org

WEPE0605
The role of HIV prevention media campaigns and school programs on the disclosure of HIV status to HIV-positive children ages 8-17 in Lilongwe, Malawi

L. Parker1, L. Hinson2, A. Cornell2, C. Cox4, M. Kim3, P. Kazembe2, L. Ables4
1University of North Carolina at Chapel Hill, Chapel Hill, United States, 2Family Health International, Durham, United States, 3Baylor International Pediatrics AIDS Initiative, Baylor College of Medicine, Houston, United States, 4University of North Carolina Gillings School of Global Public Health, Chapel Hill, United States

Background: Formative research was conducted at The Baylor College of Medicine Abbott Fund Children’s Clinical Centre of Excellence-Malawi (COE) to explore how best to disclose these HIV-positive status to HIV-infected children. Information on the influence of media campaigns and school programs on disclosure emerged from discussions with caregivers described their disclosure experiences.

Methods: Semi-structured interviews were conducted with 15 parents/care-
givers of HIV-positive children 8-17 years old who had previously disclosed their child’s HIV diagnosis and 9 parents/caregivers of HIV-positive children 8-17 who had not previously disclosed. Questions explored reasons for dis-
closing or not; the disclosure experience; and recommendations for disclosing an HIV diagnosis to children. Semi-structured interviews were transcribed and coded in Atlas-TI. Qualitative content analysis was conducted to identify themes and patterns.

Results: Many parents/caregivers who had previously disclosed and those who had not believed that HIV prevention media campaigns and school pro-

grams played a major role in preparing HIV-positive children for disclosure. Parents/caregivers felt children were exposed to a variety of HIV prevention information through radio dramas, television programming, and school pro-

grams and that this provided children with knowledge about HIV and created a dialogue between parents/caregivers and children. Media acted as a trigger for disclosure discussions and was used as a tool to facilitate HIV discussions with children. These programs influenced the questions children asked their parents/caregivers and providers about HIV and ARVs. In a few cases chil-
dren recognized their medication on TV and asked their parents/caregivers about the medication. Finally, some parents/caregivers had been influenced by school media campaigns and school programs help HIV-positive children cope with their diagnosis post-disclosure.

Conclusion: In the future, health care providers can work with parents/care-
givers to link information children may have learned on TV, radio, or through the current school-based HIV education programs to the disclosure process.

Presenting author email: Laber@email.unc.edu

WEPE0606
"Live for them to see, act for them to learn" - HIV status disclosure of women living with HIV on HIV/AIDS awareness raising and stigma and discrimination reduction in the community

N. Paenggosuk
Kon Khon PWA Network, Nakonnithammarat, Thailand

Issues: HIV status disclosure is a right of a person which is a sensitive issue especially to the HIV infected women due to stigma and discrimination towards them in the community. It is a tough decision to disclose HIV status to other people including their families and communities.

Description: From the writer’s experience in working as a woman living with HIV on a program to strengthening/building capacity of HIV infected women in 4 provinces of Southern Thailand using the peer concept "Live for them to see, Act for them to learn" focusing on disclosure and living and working as a dignified capable woman living with HIV. The peer to peer curriculum was developed to be the tool to communicate with women living with HIV and to build their capacity as a peer educator. The content of the curriculum include: gender beliefs, feelings about HIV, issues to partner/children, reproductive health and rights for women. They are encour-
aged to advocate for women living with HIV and to establish the peer group or provincial levels.

Lessons learned: “The live for them to see, Act for them to learn” concept can be used by the PLHIV to promote HIV/AIDS prevention and support and to reduce stigma and discrimination towards women living with HIV and en-
ourage them to disclose their HIV status because the PLHIV who can enjoy better health care services, reproductive health and right protection. This, however, cannot be successful without the parallel community education and sensitization on HIV/AIDS.
Next steps: This model is encouraged to be scaled up and included to the works of PLHIV groups as well as the programs and activities of health service centers. The need to continue to the needs of women living with HIV in promoting and protecting their reproductive rights and health.

Presenting author email: nimmammon@hotmail.com

WEPE0607  
**It was a mistake to disclose my HIV+ status**: results from the “AIDES et toi” survey

O. Rolas Castro1, C. Andreo1, J.M. Le Gall1, B. Spire1  
AIDES, Methodologie, Innovation, Recherche, Evaluation, Paris, France, AIDES Nationale, Paris, France, INSERM UMR912, Marseille, France

Background: Disclosing HIV+ serology is a major concern for most PLHIV. As discrimination is a possible negative consequence of disclosure, this study aimed to analyze factors associated with regretting or not disclosure and the role of experiencing discrimination.

Methods: A nation-wide self-administered questionnaire with standardized items including socio-demographics, disclosure and discrimination after disclosure was filled out by 2434 people in contact with AIDES, the largest French CBO. 1098 reported being HIV+.

A logistic regression was performed in order to identify the factors associated with stating that it was a mistake to disclose HIV+ status.

Results: Almost all the respondents (95.9%) disclosed their HIV+ status at least to one person. Among these ones, 47.9% stated that it had been a mistake to disclose. 33% were women and 42% were MSM. 21.1% were migrants, 62.1% reported having a steady partner, and 29.6% declared being discriminated against in work settings.

Factors associated with regretting disclosure were being a migrant (OR: 0.7; p<0.05), having been discriminated against because of HIV status in the last two weeks (OR: 0.5; p<0.01) and having been discriminated against in work settings (OR: 1.7; p=0.01). On the contrary, having a steady partner (OR: 0.6; p<0.05), disclosing HIV status to work colleagues (OR: 0.4; p<0.001) and considering that in the near future people from their own community will have a positive influence regarding care (OR: 0.7; p=0.05) were protective factors.

Discussions: The discrimination experienced in work settings seems to be a major reason for regretting disclosure. Developing specific interventions to avoid discriminating attitudes in the workplace are urgently needed.

Migrants also have to cope with particular difficulties when disclosing their HIV+ status. Furthermore, the role of providing support by own community members in a protective factor against regretting disclosure.

Presenting author email: drolas@aides.org

WEPE0608  
Being invisible in shorts “women and HIV” movies link art and activism to create public visibility

I. Renue  
Act Up Paris, Paris, France

Issues: There is definitively a specific distinction between women and HIV-prevention, treatments, or even personal situation require an approach of their own, which is most of the time lacking. In an attempt to reverse this trend, and considering the total absence of any such initiative, Act Up-Paris under-takes an ambitious project: the creation and subsequent broadcast on national television networks of short movies depicting women living with AIDS.

Description: The presentation will describe:
- The background and preparation work carried out by the artists and the production company before the movie. From start to end, the production is handled by women.
- The wide range of characters and situations, in an attempt to answer to the total lack of public representations of women living with AIDS.
- The work of promotion and diffusion of movies (avant-premieres, ARTE interviews in the news, internet sites, ...).
- The connection to the broader work by Act Up-Paris on this very point:
An activist as the main character of the movie, promotion of the movie a few days before the World Aids Day of December 1st, organization of a colloquium on Women and HIV.

Lessons learned: The success these short movies were met with illustrates well the dire need for a public representation of women with HIV, as well as the key role that these types of shorts can play within the different communities they were aimed.

Next steps: Produce and Disseminate a DVD to make this work even more accessible.

Presenting author email: iberne@yahoo.fr

WEPE0609  
Positive and kicking: understanding and addressing HIV/AIDS related stigma through sport

O. Nwonga  
Southampton Solent University, Faculty of Business, Sport & Enterprise, Southampton, United Kingdom

Background: HIV/AIDS stigma threatens to undermine management of the HIV/AIDS epidemic. Effective HIV/AIDS prevention gains achieved through Anti-retroviral (ART) drugs programme in Sub-Saharan Africa. Sport and other important cultural forms have potential to contribute towards the addressing HIV/AIDS related stigma. However, to address stigma through sport, a thorough understanding of the nature of stigma and how sports provision can encounter this development is needed. The aim of the study was to investigate the factors and processes associated with addressing stigma through a sport programme for PLWHA in Zambia. The programme is called Positive and Kicking and it is run by FONGWA Zambian People Living with AIDS (NZA) and Act Up Paris.

Methods: The research applied was Participatory Action Research (PAR) workshops and Qualitative in-depth, semi structured interviews with a sample of 24 participants. The sample comprised programme participants, programme officers and significant others of the people taking part in the programme. The research was an exploration of the following key aims of the study.

Results: The main key themes emerging from the in-depth interviews and the PAR workshop include: social identity construction opportunities in sport, sport related HIV/AIDS stigma, health benefits of sport, sport as a political tool, creating friendly environments within sport, sport for all, limited support for sports the Positive and kicking programme and limited involvement of PLWHA in programme development and delivery. 24 participants. The sample comprised programme participants, programme officers and significant others of the people taking part in the programme.

Conclusions: Findings support the view that well designed sport programmes can be suitable interventions to contribute towards addressing HIV/AIDS related stigma and some of its consequences. However, sport programmes need to involve PLWHA in the planning and delivery of programmes. In addition, sport programmes must emphasize developing friendly and less threatening environments, enhancing opportunities for creating sport identities, for example the empowerment of PLWHA to become sport leaders and supplying them with sport attire is crucial.

Presenting author email: oscar.mwaanga@solem.ac.uk

WEPE0610  
Disclosure, discordance and domestic violence

A. van der Kwaa1, K. Fering1, E. Kwagala2, H. Ormel1, A. Richters2  
*Royal Tropical Institute, Development, Policy and Practice, Amsterdam, Netherlands, +Makearere University, Department of Population Studies, Kampala, Uganda, $Lead University of Mombasa and Departments in Kenya*

Methods: Members of discordant couples with counselling services in Eastern Africa are often requested to bring in their partners and discuss their status. We explore the gender quality within and among an enabling environment to problematic. When this is not the case, domestic violence may occur. Providing and counseling need to be aware of these consequences, and adapt their protocols accordingly. Further, they should critically analyse their own role and how it influences their work.

Issues: Members of discordant couples with counselling services in Eastern Africa are often requested to bring in their partners and discuss their status.

Description: Studies in Kenya and Uganda, as well as a priority setting process within the Great Lakes AIDS Research Consortium, indicate that couples assumed to be discordant face difficulties disclosing their status. Often, counselors encourage disclosure regardless of gender, age, and household situation, which can put positive people at an increased risk of domestic violence. While our studies found that counselors were well-trained and could adequately handle other sexuality issues, the issue of disclosure exposing positive people in discordant couples to potential violence requires more attention.

Lessons learned: Agency and social capital - how people relate - should be studied in the field of disclosure and disclosure, because they help determine whether violence occurs or not. People have to disclose in an empowering, comfortable and appropriate environment, otherwise the risks of violence may outweigh the benefits of disclosure.

Next steps: Protocols for applied small-scale studies are being developed that involve knowledge institutes and civil society to examine further the emerging issues of disclosure and disclosure in the context of sexuality counselling. New studies are also being developed in the field of vulnerability and social capital to prevent the victimization of these couples and instead explore their agency and coping strategies, in order to develop new, more effective interventions.

Presenting author email: k.fering@krt.nl

WEPE0611  
Through positive eyes - Rio de Janeiro, Brazil

M.C. Ramos1, L. Kamel1, I. Betto1, D. Gerei, M. Gibson2, R. Varma2  
1Brazilian Interdisciplinary AIDS Association ABIA, Rio de Janeiro, Brazil, 2Brazilian Ministry of Health, STD/AIDS and Viral Hepatitis, Brasilia, Brazil, 3UCLA/Arti/Global Health Center, Los Angeles, United States, +Make ART/Stop AIDS, Cape Town, South Africa, $Make ART/Stop AIDS, New Delhi, India

We explore the potential role of sport in reducing HIV/AIDS stigma and promoting support and self-esteem of people living with HIV/AIDS and their families.

Methods: The project consists in involving persons living with HIV on advocacy to combat stigma and discrimination. The methodology consisted of capturing images and life histories of 17 adults (male and females). A workshop was conducted (June 2009) in Rio de Janeiro. During 2 weeks they received instructions in photography and had their portraits taken. Exposures with material produced (photos, videos and posters) were exhibited. A permanent photography group was created at ABIAP for persons living with HIV. The original idea of this project “Positive Eyes” was an effective ART/STOP AIDS - MA/South Africa. In Brazil it was developed by the Brazilian Interdisciplinary AIDS Association in collaboration with Arti/Global Health Center (AGHC), University of California (UCLA) with the support of the National Department of STD/AIDS and Viral Hepatitis of the Ministry of Health.

Lessons learned: Participants revealed creative forces and became agents of change. Became more involved, self-esteem was strengthened and new social networks with group participants and the local support networks of ART/STOP AIDS were established. Images captured by participants and expositions gave participants an opportunity to deal with their lives in a more respectful way. Health promotion and HIV/AIDS prevention were strengthened. Important to point out that this experience needs to be followed by continuous support from a local group (NOG, PWA group) because many demands arise as a result of the initial photography experience.
WEPE0612
HIV infected Slovenian men who have sex with men tend to protect their sexual partners, however many struggle with disclosure of their serostatus

A. Lamut1, J. Tomášič1, T. Vovk1, R. Muršič2, J. Klar1
1National Public Health Institute, AIDS/STI/HIV Unit, Communicable Diseases Centre, Ljubljana, Slovenia; 2Infectious Diseases Clinic, University Clinical Centre Ljubljana, Ljubljana, Slovenia; 3Faculty of Arts, University of Ljubljana, Department of Ethnology and Cultural Anthropology, Ljubljana, Slovenia

Background: In the context of the recent increase of newly diagnosed HIV cases among men who have sex with men (MSM) in Slovenia and the important role of “positive prevention”, the purpose was to improve understanding of the influence of HIV diagnosis on their quality of life and sexual behaviour.

Methods: Recruitment of a convenience sample of HIV-positive MSM through the national HIV/AIDS treatment site started in January 2010. By 1st February 2011 13 in-depth, semi-structured interviews were audio recorded and transcribed verbatim. Preliminary analysis was conducted according to the grounded theory approach.

Results: After diagnosis, majority experienced “shock”, stopped having sex and some had suicidal thoughts or eating disorders. Many, regardless of age or social status, fearing stigmatization and social exclusion, had not disclosed their status to any third person, yet another reported “regular life”, which he described as “not much has changed” and some even “my life became more active”. Although a minority had not yet resumed sex, majority became sexually active again, reported no problems with sexual arousal, strong “responsibility” for not infecting their sexual partners and consistent condom use during anal sex. Some also emphasized the importance of their low viral load due to HAART in protecting partners. Minority did not disclose their serostatus to their steady partners nor did the majority to casual sexual partners, due to fear of sexual rejection or “ruining the moment” of sexual intimacy, respectively. Many emphasized their satisfaction with the support of their physician and the contribution of HAART to their physical wellbeing.

Conclusions: The support of physicians and HAART enabled the majority of the participants to resume a normal life. Further investigation of different individual, interpersonal and contextual factors contributing to disclosure of one’s serostatus and protecting their sexual partners is needed to inform “positive prevention” including improved psychosocial support.

Presenting author email: ales.lamut@rvsi.si

WEPE0613
Pouvoir partager/pouvoirs partagés (PP/PP) (sharing together...for life): experiences of HIV disclosure from a skills-building program by and for women living with HIV

J. Otis1, É. Bellier2, L. Massie1, PP/PP Study Group
1Université du Québec à Montréal (UQAM), Caisse de Recherche du Canada en Éducation à la Santé, Montréal, Canada, 2Université de Nantes, UFR Psychologie, Nantes, France

Background: For a person living with HIV (PHLV), the issue of disclosing their status in diverse contexts is a burden they bear throughout their life. PP/PP is a program developed by and for women living with HIV (WHLV) that aims to help making informed decisions on this issue within various contexts and to develop and use strategies to support this decision. It has seven workshops (three hours each) based on participatory methods and facilitated by WHLV who are also program alumni.

Methods: Between September and December 2009, 72 WHLV (Quebeckers, Africans, Haitians, Asians and South-Americans) participated in these workshops situated in different regions of the province of Quebec, Canada (12 groups). A mixed design was put in place to document the effects of the program: self-administered questionnaires pre-post-intervention; discussion groups with the participants; journals from the facilitators and the coordinator.

Results: Following their participation in the program, women were more able to recognize the importance of their support of other women in this decision-making process (3.88 vs 4.39; p ≤ 0.003). They felt more capable: to make an informed decision according to the context (3.31 vs 4.04; p ≤ 0.0001); to plan and apply strategies to keep the secret (3.24 vs 4.23; p ≤ 0.0001); or, to disclose (2.94 vs 4.06; p ≤ 0.0001) if that was their decision. PP/PP promotes respect for cultural diversity and addresses the issue of disclosure with respect to each participant’s trajectory. It contributes to the building of WHLV and has excellent potential for transferability.

Presenting author email: otis.joanne@uqam.ca

WEPE0614
Optimal timing for disclosure of HIV sero-status to vertically infected children and adolescents in Uganda

I. Kalungyutsuba1, M. Mubiri1, V. Nakimbugwe1, S.A. Kelly2, G. Ndezi2, M. Namara1, E. Kangave1, B. Ali1, M. Crofts1, A. Should1, K. Olness3, and the Staff of Baylor College of Medicine Children Foundation Uganda
1Mulago Hospital, Kampala, Uganda; 2Makerere University School of Medicine, Kampala, Uganda; 3Paediatric Infectious Disease Clinic at Mulago Hospital, Kampala, Uganda; “Case Western Reserve University, Cleveland, United States, 4University of Indiana, Bloomington, United States; “Baylor International Pediatric AIDS Initiative, Baylor College of Medicine, Houston, United States

Background: With or without ARVs vertically HIV infected children are growing to adulthood. They need to learn their HIV status as they prepare to start their own families.

Objective: To ascertain what Ugandan children and adolescents, vertically infected with HIV, felt to be the optimal timing and conditions under which they should be informed of their status and to document the perceived impact of this information on them and their families.

Methods: We conducted this cross-sectional study between November 2004 and May 2005 following Institutional Ethical Committee, Mulago Hospital Ethics committees, Baylor College of Medicine and Uganda National Council for Science and Technology. All HIV infected child (11-18 years old) who had been informed of their diagnosis and were receiving care at the Paediatric Infectious Disease Clinic (PIDC) at Mulago Hospital, Kampala Uganda were included in the study.

Results: One hundred and eighty seven children, with a mean age of 13.2 (± 0.88) years, were interviewed. Fifty-nine percent were informed with consent of the timing of their disclosure.

Children generally advocated disclosure of their status by close relatives, 50% preferring their mothers. Following disclosure, 45% children reported having felt nothing while others reported transient feelings of fear, sadness, anger or confusion. Seventy seven percent children did not divulge their HIV status following disclosure because they all appreciated the stigma associated with HIV/AIDS. They advised that all HIV infected children should be told their status by age 10 years. Parents/guardians expressed satisfaction with the results of the disclosure.

Conclusion: They appear to quickly accept their HIV status and tend to handle the diagnosis very well. The benefits of disclosure to HIV infected children outweigh the perceived fears of their parents/guardians and health workers.

Presenting author email: israalekynysubata@yahoo.co.uk

WEPE0615
Correlates of sexual initiation among adolescents with perinatally acquired HIV

J. Koening1, S. Palis1, S. Chandwani2, K. Hodg1, S. Abramowitz2, W. Barnes3, L. D’Angelo4
1Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention, Atlanta, United States; 2New York University School of Medicine, New York, United States; 3Johns Hopkins Bloomberg School of Public Health, Baltimore, United States; 4Children’s National Medical Center, Washington, United States

Background: In the United States, many children with perinatally acquired HIV have reached adolescence; many of them are sexually active. To appropriately address reproductive health needs, knowledge of the cofactors associated with sexual initiation in this population is needed.

Methods: Ninety-nine perinatally infected youth ages 13-21 years (mean = 15.6 years), receiving care in Washington DC, New York NY, or Baltimore MD, completed a baseline assessment as part of the Adolescent Impact interventional study. In face-to-face or computer-assisted interviews, participants self-reported personal characteristics (age, gender, race, ethnicity, sexual orientation, housing status), sexual initiation (ever had vaginal, anal or oral sex that was not forced), lifetime drug and alcohol use, emotional and behavioral problems, HIV knowledge and social support. Most recent CD4 and viral load, and current antiretroviral use, were abstracted from medical records.

Results: Participants were predominantly of minority race/ethnicity (67.7% non-Hispanic black, 27.3% Hispanic); 56.6% were female; 67.7% lived with relatives. Overall, 46.5% (24 females, 22 males) reported having become sexually active (mean age at initiation = 12.3 years for females vs. 15.5 years for males), 53.5% (20 females, 25 males) did not. Likelihood of having become sexually active increased with each year of age (Odds Ratio [OR] = 1.22, Confidence Interval [CI] = 1.01, 1.48). In age-adjusted analyses, sexual initiation was significantly associated with drug use (Adjusted OR [AOR] = 9.58, CI = 2.34, 15.96), externalizing behavior problems (AOR = 1.06, CI = 1.02, 1.10) and greater HIV knowledge (AOR = 1.18, CI = 1.01, 1.37).

Conclusions: As we preserve and extend the health of perinatally infected children, sexual initiation should be anticipated. Developmentally sensitive anticipatory guidance regarding sexuality and reproductive health may be more effective if it goes beyond HIV transmission risk and contraceptive counseling to also address substance use and mental health needs.

Presenting author email: JKOENING@cdc.gov
WEPE0616
The Children's Support Group: providing a secure space and support in Kigali
B. Mulinda Shambu
WE Act for Hope, Family Program, Kigali, Rwanda

Background: During three years of HIV treatment interventions Women’s Equity in Access to Care and Treatment (WE-ACTx), observed that infected mothers experienced challenges concerning disclosure about their status to their infected children. Some parents, who admitted they had infected their children, reported that these children were severely traumatized. Since 2006, WE-ACTx has implemented the Children’s Support Group to address this trauma.

Methods: Using WE-ACTx clinics in Kigali as entry points, children (5 to 21) infected or supposedly infected by their parents are recruited into 8 different age-groups. Each age-group has a facilitator that teaches reproductive health, HIV education, and brings children to trauma counsellors when needed. During the weekly Sunday sessions, children play soccer and engage in other recreational activities in a large outdoor space. WE-ACTx staff organize an interactive session each Sunday to promote a healthy habit. For children needing more intensive support, WE-ACTx organizes home visits.

Results: WE-ACTx has recruited 230 children into the Support Group. Although a formal evaluation of this intervention’s impact has not yet been conducted, informal interviews of children and their parents indicate that trauma-related conflicts have reduced in households. Furthermore, WE-ACTx has received unsolicited appreciation from parents. Most of the children in the support group report that they are now more self-confident from the solidarity in the Sunday program. Stigma has been reduced as evidenced by a greater adherence to clinic visits and HIV medications among those attending the Support Group.

Conclusions: Among the many problems that families living with HIV/AIDS face, acrimony between children and their parents from blame and guilt over mother-to-child transmission needs greater attention. We recommend that partners assess the psychosocial dynamics in homes with mother-to-child transmission of HIV and take lessons from the WE-ACTx Children’s Support Group in designing a response.

Presenting author email: mulindasha@yahoo.fr

WEPE0617
Using rivers of life to explore significant occurrences in HIV-positive young people’s lives: data from Harare, Zimbabwe
M. Makambo, W. Mavhui, N. Wills*, S.M. Laver†, F.M. Cavanagh†*
†Zimbabwe AIDS Prevention Project-University of Zimbabwe, Regal Drive Shiri, Harare, Zimbabwe, Zimbabwe AIDS Prevention Project-University of Zimbabwe Department of Community Medicine, Regal Drive Shiri, Harare, Zimbabwe, ‡University College Medical School; University College London, Centre for Sexual Health and HIV Research, London, United Kingdom

Background: This work was part of a study to develop an evidence-based intervention for HIV-positive adolescents to improve their psycho-social and HIV outcomes. This sub-study sought to explore the nature, timing and consequences of significant events that HIV-positive adolescents have experienced using a participatory tool, the river of life, in order to inform the development of the intervention.

Methods: Sixteen narratives were conducted with 15-18 year-olds purposefully selected from 229 support group attendees. Participants were asked to chronicle their lives by drawing a river, marking key events with either an upward (positive occurrence) or downward flow (negative event). These drawings served as stimulus for in-depth discussions of their lives. Discourse were audio-recorded, transcribed, translated into English, coded into HIV-related themes, and compared using grounded theory principles.

Results: Negative occurrences included frequent illness leading to their diagnosis, deaths of family and friends. Frequent illness was characterised by clinical signs that were visible to others, repeated hospitalisations and absences from school resulting in feelings of isolation, stigma, discrimination and depression. Adolescents who had witnessed parent illness and death described feelings of anxiety, distress and grief. Parental death resulted in them moving home leading to a separation from siblings and friends plus living with their (often hostile) extended families. Initial knowledge of HIV status invoked feelings of imminent death and hopelessness. Overall, positive occurrences related to doing things that were normal for people of their age group such as starting school; dating; joining a sports team, and going to parties. All were relative to other people and using grounded theory principles.

Conclusions: More tools are needed to support children and teenagers living with HIV: an opportunity for HIV-positive youth coming from all over France to develop peer support during winter and summer camps.

WEPE0618
What do young European HIV+ say?
N. Curriel Aguilar, X. Clusellas, M. Moreno*, M. Lanasapa, C. Fortuny†, P. Garriga†
*Fundacíó Paca para el SIDA Pediatra, Barcelona, Spain, †Fundacíó Paca para el SIDA Pediatra, Nurse, Barcelona, Spain, ‡Fundacíó Paca para el SIDA Pediatra, Pediatrician, Barcelona, Spain, †Fundacíó Paca para el SIDA Pediatra, kidnapper, Barcelona, Spain

Background: Adolescents HIV are the first generation born with HIV and are a vulnerable population with regard to adherence to ARV therapy, risky sexual behaviours and social isolation. Our goal is to meet the aforementioned characteristics of this collective from working directly with them.

Methods: In July 2009 the 7th European meeting of young HIV + MCHT was held in Barcelona, with 85 participants from 12 to 25 years old from 15 European countries, who completed a questionnaire of 22 questions related to their adherence to ARV therapy, health, HIV education, and bringing them to youth support groups. Eventual results and possible conclusions related to doing things that were normal for people of their age group including the possibility of adherence to ARV therapy, risk behaviours and social isolation. Our goal is to meet the aforementioned characteristics of this collective from working directly with them.

Results: 54 girls and 31 boys MCHT participated in the meeting. 62% answered the questionnaire. 45.3% take ARV qd, 28.3% bd. 66% take every day their medication, although only 60% during weekends. 69.8% always practice safe sex, 50.9% consume alcohol (17% 20 cigarettes / day or more), 37.7% smoke cannabis. 39.6% knew their diagnosis when they were 10-14 years old, 33% after 15. 43.4% of the diagnoses were reported by the physician, 32.1% by parents. Of half of them do not agree with how it was communicated to them. 22% never share their diagnosis with their partner and 32% never share it with their friends.

Conclusions: Although ARV medication regimens are more comfortable than in previous years, its adhesion is not optimal. One in three recognizes toxic habits and practices of unsafe sex. There is secrecy and an inappropriate timing regarding communication HIV diagnosis. We should improve empowerment, counselling and young and families’ abilities regarding communication of diagnosis to combat social stigma and ameliorate self-esteem.

WEPE0619
Maison du Soileil (Sunshine House), a 15-year-old programme for children and teenagers living with HIV: an opportunity for HIV-positive youth coming from all over France to develop peer support during winter and summer camps
F. Binsouest, A. Rodriguez, S. Aurand, B. Raout, J. Volant, V. Cazaly, S. Giganon, I.A. Lefevre
†AIDES, Nîmes, France, ‡AIDES, Montpellier, France

Issues: In France, access to medical and social care is widespread, but comprehensive support for HIV-affected children and teenagers remain limited. Support groups and activities for teenagers living with HIV are rare, due to financial and geographical issues. Maison du Soileil was created in 1995 by AIDES, the largest French HIV/AIDS/Hepatitis non-profit community-based organisation, to provide HIV-affected youth with a holiday and an opportunity to share experiences and develop peer support in a secure environment.

Since 2008, we have focussed on expanding our action with teenagers in a participatory approach.

Description: In 2009, 3 camps were managed by 9 trained volunteers and 2 permanent AIDES staff, 3 nurses, 12 camp counsellors, for 61 participants: a February winter sports week for teenagers, and two 3-week summer camps for teenagers (13-16 year-olds) and children (6-12 year-olds). The teenagers were invited to participate in planning, implementing and evaluating a mobile camp with varied activities and discussion/support groups. The children stayed in a camp with outdoor and cultural activities. All were asked to appraise their stay, and feedback from families was collected a few weeks after camp.

Lessons learned: Teenagers formed a tight-knit group and were very supportive of one another. During discussion times, most frequently raised topics were the impossibility of disclosure, particularly to friends and sexual partners, making plans for the future and defining identity. Use of a retroviral video (making a short film or a musical clip) was an effective tool for expressing emotions. The children and their families reported strong satisfaction after camp, particularly over support from volunteers, enjoying activities and making friends.

Next steps: More tools are needed to support children and teenagers living with HIV so that they can develop their own strategies for disclosure. Future efforts will be on enabling teenagers to keep in touch after camp to maintain peer support, and reinforcing year-round follow-up.

Presenting author email: lefevre@aides.org

WEPE0620
Effective strategies for reaching HIV-positive YMSM of color: lessons learned
K. Byens, A. Quamina
AIDS Project of the East Bay, Youth Services, Oakland, United States

Issues: Traditional adult models of outreach and care have been unsuccessful at keeping youth engaged in care. Innovative models of outreach and care designed with youth in mind are needed to find, engage, and retain HIV-positive youth in care. Through a U.S. HHS, HRSA-SPNS grant AEPB was funded to identify and retain in care HIV-positive young MSM of color using outreach methods.

Description: CIP is a demonstration project that has developed strategies for identifying and retaining young MSM of color in HIV specialty care through a variety of innovative strategies. This five year program began by trying to transact outreach and retention strategies that have been used successfully in other contexts with HIV-positive adults or with HIV negative youth.
WEPE0621
Acquired HIV from my mother: how do I live in Trinidad and Tobago?

D. Joseph1,2,3

1University of the Southern Caribbean, Sociology and Social Work, St. Joseph, Guyana, 1Ministry of Education, Educate-U Student Services Division, Pembroke Street, Trinidad and Tobago, 2Community Action Services, Trinidad, 3Trinidad and Tobago

Issues: The HIV/AIDS prevalence rate in the Caribbean is second only to Sub-Saharan Africa and higher than the global rate. HIV/AIDS presents a real threat to children as they account for one in six global AIDS-related deaths and one in five global HIV infections. Furthermore, the number of new cases of children in the region is growing. Despite the impact of HIV/AIDS on Caribbean children, little has been done on the psychosocial issues that affect those born with HIV. This paper is based on original research carried out in the Republic of Trinidad and Tobago.

Description: It is an unexplored ecological case study method used to gather data from a purposively selected sample of families with children between the ages of 5-13 years of age who contracted HIV from their mothers during pregnancy and breast-feeding. In-depth interviews were conducted with mothers, children and an extended family member or friend of the mother. Interviews were recorded and data were analysed thematically.

Lessons learned: Most children and parents did not know how to deal with that emotion. There was generally no discussion of HIV in the household and HIV was equated to death and dying. Yet, the children still conveyed hope for the future. They had the urge to help their mothers with chores around the home and they worry about the well-being of their mothers. Disclosure to anyone was not permitted. Children thought that they were no different from their peers who were HIV negative even with stigma and discrimination.

Next steps: The next step will be for the study to reach lingering implications for social work practice in the Caribbean and in the rest of the world and others directly involved with families living with HIV/AIDS and also, importantly provide a forum for the voices of young children to be heard.

Presenting author email: devinejohnes@gmail.com

WEPE0622
Disclosure of HIV to perinatally infected children and adolescents

K. Cavolo1, A. Myerson1, W. Nei1, G. Weinberg1, T. Hatton1, B. Agins1, G. Brown1, T. Lin2

1Johns Hopkins University School of Medicine, Division of Infectious Diseases, Baltimore, United States, 2Montefiore Medical Center, Adolescent AIDS Program, Bronx, United States, 3Columbia University Medical Center, Special Needs Clinic, New York, United States, 4University of Rochester, School of Medicine and Dentistry, Division of Pediatric Infectious Diseases, Rochester, United States, 5SUNY Downstate Medical Center, HEAT Program, Brooklyn, United States, 6New York State Department of Health, AIDS Institute, Albany, United States, 7New York State Department of Health, AIDS Institute, New York, United States

Issues: One of the most difficult issues faced by families of HIV-infected children is when and how to talk about HIV with these children. To ensure that disclosure of an HIV diagnosis occurs in a developmentally appropriate manner, the New York State Department of Health AIDS Institute (NYS) in partnership with Johns Hopkins University, has issued guidelines to promote the development of a treatment plan for providers and caregivers in disclosure to perinatally infected children and adolescents. This guideline is posted to the website www.hivguidelines.org.

Description: The disclosure guideline addresses specific strategies for collaboration between the treatment team and caregivers to create an individualized disclosure plan; age-specific considerations for disclosure; preparing families for the disclosure discussion; considerations for disclosing to adolescents; and emotional support for the child. The guideline emphasizes that disclosure of HIV status is not a one-time event but rather a process that is ongoing and that can be as the child matures. The timing of disclosure becomes more pressing as the child nears adolescence, a time when the potential to engage in sexual and substance-use behavior may emerge.

Lessons learned: Post-disclosure follow-up is necessary to ensure that the child understands he/she is HIV-positive. Developmentally appropriate and truthful explanations of the illness, validation of the child’s concerns about the illness, clarification of any misconceptions, and ongoing support are the cornerstones for promoting a positive adjustment to living with HIV infection. Disclosure can provide an opportunity for families to share important information and to focus on health, communication and relationships.

Next steps: The NYS guidelines program is working to disseminate the disclosure guidelines broadly to multidisciplinary care teams who work with caregivers of HIV-infected children.

Presenting author email: brownlj@mail.nih.gov

WEPE0623
Food for thought: examining nutrition and ARV compliance within the cultural framework of WA, Ghana

K. Bamberger1, A. Beavis1, L. Chen2, D. Choi1, L. Daley3, S. Donaldson1, J. Edge1, R. Gill1, N. Halder1, A. Keng1, G. Klassen1, M. Liu1, T. Liu1, B. Preater1, K. Steemler1, C. Travers1, L. Wang1, J. Zhao1, F. Vimala2, S. Barrett3

1McMaster University, Bachelor of Health Sciences (Hons.) Program, Global Health Specialization, Faculty of Health Sciences, Hamilton, Canada, 2True Vision Ghana, Tamale, Ghana

Issues: This field research employs an advocate/participatory paradigm to address the interaction of antiretroviral (ARV) treatment, malnutrition, and cultural practices in the care of HIV+ orphans in Ghana. The international community has attempted to make ARVs available at affordable costs to HIV+ persons in the global fight against AIDS. Although improved access to ARVs is necessary, it is not sufficient. Our recent experience in WA, Ghana has revealed that malnutrition, noncompliance and cultural dynamics prevent the effective use of ARVs, especially for young HIV+ orphans. Description: Our research was based on six months of field experience in partnership with True Vision Ghana, a Ghanaian non-governmental organization working to promote the rights of HIV+ orphans. An ethnographically centered approach was used to observe these HIV+ orphans and their roles within the community of WA. Qualitative data was primarily collected through health monitoring interviews and interaction with HIV+ orphans and their caregivers.

Lessons learned: Our observations confirm that discrimination occurs against HIV+ orphans who are not biological within the household. This discrimination manifests itself in unfair allocation of resources and inadequate nutrition for the child, having serious repercussions on the effectiveness and compliance of ARVs. Cultural norms unique to Ghana, such as adults being fed before children, magnify the deleterious effects of limited food resources. Consequently, care for HIV+ orphans in Ghana needs to be addressed within the cultural context.

Next steps: In response to these issues, there is a need to develop strategies to reduce: 1. the effects of malnutrition, 2. non-compliance to ARVs and 3. social stigma for HIV+ orphans.

These strategies must fit within the socio-cultural and agricultural framework of the community, and involve education of caregivers to maximize child empowerment over their physical health and social wellbeing.

Presenting author email: christina.klassen@learkin.mcmaster.ca

WEPE0624
Experience of being born with HIV: Eseri’s story - a child receiving treatment at TASO mbale

E. Muduza1, J. Babiney1, C. Nabude1

1The AIDS Support Organisation (TASO) Uganda Ltd., Client-Living HIV/AIDS, Kampala, Uganda, 2The AIDS Support Organization (TASO) Uganda Ltd Medical, Kampala, Uganda, 3The AIDS Support Organisation (TASO) Uganda Ltd., Counselling, Kampala, Uganda

Issues: According to statistics from Uganda’s Ministry of Health and UNAIDS, we are about 110,000 children living with HIV/AIDS; 47, 000 children are in need of treatment however, only 9,500 of us are receiving ART. The number of children born with HIV is escalating and few Health service providers have come out to address their needs. I want to share my story to encourage other children like me and advocate for their support.

Description: I have lived with HIV for 18 years now. My mother died when I was 5 years and left no document for me to know how she looked like. I was attacked with several opportunistic infections including Tuberculosis. I have struggled with stigma and discrimination as a child… I encountered resistance from home in my attempts to come on ART until my teacher supported me on how to do the test single handedly. I tested HIV+ in 2004 at AIDS Information and Reference Center and was referred to The AIDS Support Organization (TASO) for support. I registered with TASO Mbale where I was assigned a counsellor who has always been there for me, droping all my problems and I have a lot of hope in me. I have access to free medical, counselling and social support services, I started ARTs in 2006 with a CD4 count of 188 and now it has risen to 700cells/mm3.

Lessons learned: Children born with HIV like adults live with pain, stigma and discrimination. Parents are not open to discuss HIV/AIDS issues with them however with love, treatment, and support, their health improves significantly.

Next steps: There is need for Health programs to provide child friendly HIV/ AIDS services, as there are many children who are not accessing these services. Parents and caregivers should support children born with HIV/AIDS.

Presenting author email: muduwaeseri@yahoo.com

Abstract Book Volume 2 | www.aids2010.org
WEPE0625

Mind the gap: between paediatric and adult HIV services
M.S. Mudyavanhu, B. Gordon, F. Mwangolo
PositiveView Women, London, United Kingdom

Issues: The life expectancy of a vertically infected HIV+ adolescent living in the UK has become equal to that of an HIV- adolescent. However support groups, information and education for HIV+ adolescents are not adjusting accordingly. From personal experiences and conversations from youth conferences and residential conferences, there is still a great demand for adolescent’s needs to be addressed both medically and emotionally during transition. The pathway from paediatric to adult HIV care is unstructured amongst Health Care Professionals (HCP) leaving adolescents like myself uncertain and insecure during this stage. The need for bridging services has been recognized yet this has not been developed. This includes handing over responsibility of the adolescent’s health from the parent to the adolescent.

Description: I am creating services specifically for adolescents who feel uncomfortable in child services, but feel they are not ready to access adult services, such as supports groups, clinics and health support. Bridging the gap between the two will enable more adolescents to have a seamless transition. Ensuring positives impact on their health and future. Positively Women’s peer to peer support model is being adapted to create opportunities for HIV-positive adolescents to gain from peers who have been in the same predicament as themselves.

Lessons learned:
• Transitioning affects HIV+ adolescent and everyone involved.
• Peer mentoring is the best form of education as the adolescents gain an insight, into another adolescent’s experience.
• HCP are unsure when/how to begin preparing adolescent’s for adult services. They need the right information to support the adolescents in their clinic.

Next steps: Develop peer led education for HIV+ adolescents. Create bridging services for adolescents not yet ready for adult services. Educate and support HCP on how to approach young adults entering transition and circuits best practices.

Support parents/carers handing over responsibility of their health to the adolescent.

Presenting author email: mudyavanhu@hotmail.com

WEPE0626

Issues and concerns of uninfected adolescents in families with HIV-sero positive parents
S. Mann, D. Baiji
Child Survival India, Delhi, India

Issues: Although HIV infection is now being seen as a chronic illness, it is estimated that there are about 1 million AIDS orphans in India. Uninfected adolescents of HIV-Sero positive parents are often neglected. Limited healthcare and monetary resources are focused on infected person, his or her partner, and any infected children.

Child Survival India, as part of its community based care & support program, explored the impact of HIV on uninfected adolescents in about 200 HIV infected families in urban and village communities of North West Delhi, India.

Description: Parental illness and death are particularly difficult for adolescents. Adolescents & young people living in HIV affected households often have to assume responsibility for running the household, caring for younger siblings and sick parents and providing emotional support to parents. Stigmatization through no fault of their own, youngsters are far more vulnerable to abuse and violence, and many drop out of school and/or are forced into child labour.

Young girls are often hurriedly married off to incompatible partners or become victims of sexual exploitation.

Lessons learned: Parents need to be prepared and motivated to share their position and health status as though nothing is verbalised, a lot is communicated to children through the sickness or death in family. It is important to buffer teenagers/adolescents when their parents are ill or dying by helping them cope with negative emotions, planning for future and reducing risky behavior related to sexual activity and drug use.

Next steps: Skill training and livelihood programs along with life skill workshops could help adolescents prepare for ‘living on their own’ and understanding ‘world of work’. Social workers along with extended family have to make plans for adolescents, provide them psychosocial support so that they get a stable, consistent environment that provides love and nurturing.

Presenting author email: cs@org@hotmail.com

WEPE0627

HIV diagnosis disclosure for children living with HIV/AIDS in Ukraine: a survey of parents and carers’ expectations and fears
S. Kalamby, N. Manescu
Romanian Angel Appeal Foundation, Monitoring & Evaluation, Bucharest, Romania

Background: In 2008, Romanian Angel Appeal Foundation (RAA) surveyed the opinions and attitudes of Ukrainian parents/carers, regarding the disclosure to the child of their living with HIV/AIDS (project “Improving the Lives of Families Affected and Infected by HIV”, coordinated by participated in the Network of PHLA – Assistance and Information for children is a sensitive process that needs special tailoring – according to different characteristics of its beneficiaries - and a sound cooperation between the two main parents/carers.

Methods: Using a “take-all” approach, the survey (questionnaire based) targeted adults (HIV-positive and negative) who care for one or more children with HIV and who accessed the support services of 10 local organizations involved in the said project, during the data collection period (Nov-Dec, 2008). 76 persons have been interviewed.

Results: According to the survey data (triangulated with data from service records), the average age of respondents’ HIV+ children was 6-7 years old in 2008 – a too early age for a full DD. Most carers believed that their children are not (fully) aware of their illness with their children, but most concealed the actual diagnosis. ARV treatment was commonly explained using stories such as “these are vitamins” or “a beauty pills”. Although they recognized the importance of good and honest communication with their children, around 60% of the carers assessed themselves as “overprotective”. They suggested the age 10 as a good age to enrol children in the DD program; however only 79% of them showed interest to start the DD process in the following 12 months.

Presenting author email: fidele.kalamby@yahoo.com

WEPE0628

Human rights and the (un)institutionalization of children with HIV/AIDS in Sao Paulo
E. Franco, R. Alvarenga
Universidade de São Paulo, Escola de Artes, Ciências e Humanidades, São Paulo, Brazil

Background: Children and young people living with HIV orchidants of HIV patients may be institutionalized when their families are not capable or unwilling to take care of them. This study aimed at investigating the relation between human rights and the process of (un)institutionalization of children and young people living with HIV/AIDS.

Methods: This is a qualitative study conducted in two shelters in the State of Sao Paulo, Brazil. The methodological procedures consisted of:

a) 26 interviews (with children, youth, family members);

b) analysis of medical records
c) home visits.

The interviews were recorded with the consent of research participants, transcribed, categorized and analyzed in the light of literature.

Results: Partial results suggest:

a) the loss of life story of the children and young during their institutionalization;

b) the stigma of AIDS as a possible factor that increases the length of stay in shelters;

c) the care/assistance provided by several institutions (health services, shelter, justice, family, school), does not necessarily meet/fulfil the social and emotional needs of children;

d) lack of social assistance when they leave the shelter, often around the age of 18 years, when many young people do not have the material conditions, family and financial support and sometimes emotional conditions to stay alone.

Conclusions: So far the data indicate that, on the one hand, the institutionalization benefits children with access to food, health, school; on the other hand, it may affect the eligibility for family and community, freedom, dignity and autonomy.

Presenting author email: betefranco@usp.br

WEPE0629

HIV disclosure: barriers and motivations of caregivers

Background: Despite the therapeutic advances in pediatric AIDS care, communicating the diagnosis of a serious and stigmatizing disease has been a great challenge to professionals taking care of HIV-infected children and adolescents. The aim of this study was to identify the barriers and motivations of parents for disclose the diagnosis of HIV infection/AIDS to their children and adolescents.

Methods: This qualitative study was conducted through interviews with 20 caregivers of children followed at two reference centers for HIV/AIDS in Sao Paulo, Brazil.

Results: The concerns that explain the reluctance of family members include the fear that the knowledge of the disease gives rise to feelings of anger, unexpected reactions, attitudes of rebellion and parental blaming about transmitting infection (11/20). The negative impact on physical health status (5/20), mental health of children (2/20) and the secrecy about the disease in order to protect them from stigmatization or discrimination (5/20) specified among those with difficulties of keeping a secret (5/20) were reported by caregivers.

Immediately to cope with the illness (1/20) and the risk of HIV transmission through unprotected sex (2/20) were also mentioned by the interviews. Regarding the motivations for disclosure, the psychological assessment (2/20) and professional help (2/20) were considered “the right time” to disclose.

Presenting author email: betefranco@usp.br
WEPE0632
Milestones in the life trajectories of adolescents of the first generation of children living with HIV/AIDS in Argentina
A. Adaszko1
1Programa de Antropología y Salud, Universidad de Buenos Aires, Buenos Aires, Argentina, "Dirección de Sida y ETS, Ministerio de Salud de la Nación de, Buenos Aires, Argentina

Background: In Argentina live more than 3,000 infected children, most of them grown up in context of poverty, to which specific vulnerability caused by HIV/AIDS are added. The aim of this presentation is to identify the milestones in the life trajectories of young survivors of the first generation of children infected and analyze the narrative processes they rebuild their past with.

Methods: Study based on anthropological in-depth interviews to 25 young people aged between 13 and 19 years, treated at health services in metropolitan area of Buenos Aires, 23 infected by vertical transmission and 2 through transfusions.

Results: Their childhood took place in poverty contexts, with many situations of violence not related to HIV/AIDS, although they do constitute the background of their health / disease / care process. Most of them did not suffer episodes of discrimination. Until what was possible, their parents did what was to their reach to protect them. This led them to rely on their grandparents before and after the death of parents. Delayed diagnoses were common, as well as opportunistic infections, hospitalizations and deaths. We found three ways to tell their stories:

(a) A happy seamless childhood until the present.
(b) A childhood truncated by duels and episodes of discrimination;
(c) An unhappy childhood in which a sort of saving figure entered in scene.

Conclusions: Although diagnosis may have constituted milestones in their careers, few remember them. In contrast, death of parents is experienced as the most significant event. They produced the experience of the family system as a "rarely-institutionalization", separation of siblings, the first consideration of their own condition, the interruption of studies or treatments, the first fantasies about their own death.

Presenting author email: ariel_adaszko@yahoo.com.ar

WEPE0633
A disclosure and life skills camp for HIV-infected adolescents - the Dr. George Mukhari Hospital experience
D. Moodi1, D. Mawela1, M. Mathembu1
1Elizabeth Glaser Pediatric AIDS Foundation, Linkages, Johannesburg, South Africa, 2The George Mukhari Hospital Paediatric HIV Clinic, Paediatrics, Pretoria, South Africa, 3Medical University of South Africa (MEDUNSA), HIV Clinical Research Unit, Pretoria, South Africa

Issues: In 2007 South Africa had a total of 280,000 children living with HIV. The Dr. George Mukhari Hospital (DGMH) is a tertiary academic hospital located in Tshwane district, with 1000 paediatric patients currently receiving antiretroviral treatment. Health practitioners noted that over half of the children were unaware of their HIV status despite having been on ART for five years. Caregivers cite fear of stigma and discrimination as reasons for lack of disclosure.

Description: The American Academy of Pediatrics (AAP) guideline recommends that all adolescents who are HIV-infected must know their status. Studies done on the impact of disclosure show that children and youth who know their HIV status have better psychological adjustments, better adherence rates to treatment and have higher self-esteem. Based on this knowledge, a team from DGMH developed a physical camp program with the aim of wonders of involving 100 children and youth aged between 8 and 18 years who are on ART. Children attended the camp if their caregivers gave consent for the children to be disclosed to. The objectives of the camp were to disclose, post-disclosure counselling and to learn about sexuality. Psychologists led the disclosure sessions in each group.

Lessons learned: About 35 of the 100 children and youth who attended the camp had already suspected that they were HIV-positive. Forty children reported that interacting with other children gave them a sense of comfort that they had friends they could rely on and discuss their fears about HIV.

Next steps: Children and youth who have attended the camp will be provided with psychosocial support during their follow-up clinic visits and additional visits upon request. Two support groups for youth who have attended the camp are in the process of being formed. The Disclosure and Life Skills Camp will be an annual event for the camp to continue.

Presenting author email: dmippo@pedaids.org

WEPE0634
Lessons from the field: working with young people living with HIV/AIDS in Romania
F. Lazar1
1University of Bucharest, Faculty of Sociology and Social Work, Bucharest, Romania, "Romanian Children’s Appeal Foundation, Bucharest, Romania

Issues: Romania was known for long time as having more than half of paediatric AIDS cases in Europe, nosocomially infected in late 80’s of which 50% of those infected survive for over 20 years. Focusing services more on medical aspects than on psycho-social ones negatively affected the social integration of young people living with HIV (YPLWAH). Now, after 20 years of overprotection from the family, stigma and discrimination in the education system combined with relatively high social entitlements some YPLWAH have been able to enter the working age: between July 2007 and June 2010 aimed at increasing YPLWAH social and professional integration. It is presented the experience from one of these projects implemented by an NGO.
Description: The project targeted young people living with HIV/AIDS from families and from institutions, registered with “Dr. Victor Babes” Clinical Hos- pital from Bucharest. The project offered education for life (family planning, prevention of STIs and unwanted pregnancy) for 126, counseling, for vocational training: social integration (25), and attending training courses (25). Also, a new occupational therapy program has been established for long-term hospitalized HIV+ patients (228).

Learning achieved: Comparing the targets achieved against planned all in- dicators have been over fulfilled except for the one of people attending pro- fessional training courses. This is due to a complex of factors linked with the way YPLWA have grown up (school leaving/drop-out or poor education, underprotection from the family, low motivation). Occupational therapy proved to be the most appealing activity especially for younger people. In order to have good results with young people, we have learned that it takes time and resilience.

Next steps: With the end of Global Fund projects in 2010, some of the on- going services programs by NGOs will stop, without public financing. Further reducing the programs addressing young PLWHA’ social integration. There is a need to increase YPLWA’s social participation and independent living.

Presenting author email: flori13@yahoo.com

WEPE0635 Universal access to reproductive health for women with HIV? Policy and programme gaps in Latin America

T.R. Kendall1, E. López Uribe, G. García Patiño

1University of British Columbia, Community, Culture & Global Studies, Kelowna, Canada, 2Balance, Promoción para el Desarrollo y Juventud, Mexico City, Mexico

Background: Inclusion of “universal access to reproductive health” as a Mil- lennium Development Goal affirms the importance of reproductive rights for sustainable development and the protection of sexual and repro- ductive health services and HIV—and offering HIV testing in family planning and STI clinics and meeting sexual and reproductive health needs in HIV care—has been recognized as a crucial component of a comprehensive HIV strategy since the Glion Consensus of 2004.

Methods: Comparative content analysis of National HIV Action Plans, HIV legislation, and relevant technical guidelines of 8 Latin American countries: Bolivia, Colombia, Guatemala, Honduras, Mexico, Nicaragua, Paraguay and Peru. In-depth interviews with HIV decision-makers, healthcare providers and civil society (n=48) explored on the ground realities.

Results: Half of the national HIV plans mention the sexual and reproductive health of people with HIV, however concrete actions such as screening for the human papilloma virus, treating cervical cancer, diagnosing and treating other STIs (other than syphilis), and access to assisted reproduction are wholly absent. Only Nicaragua mentions contraceptive coverage as an indicator for evaluating the quality of HIV services. Mexico includes social marketing of fe- male and male condoms in the national plan but female condoms (FC) are not available in HIV clinics and the second generation FC cannot be imported; no other country mentions the female condom as part of the HIV strategy. Stigma- tization and discrimination against positive women’s right to bear children, instances of coerced abortion and sterilization, and failure to respond to family planning beyond negative counseling to the male condom, characterize reproduction and health care for women with HIV in the region.

Conclusions: The reproductive and sexual rights and health of women with HIV remain invisible in policy and programming of the eight countries ana- lyzed. Policymakers and HIV and reproductive healthcare providers are miss- ing key opportunities to guarantee universal access to reproductive health.

Presenting author email: tamihiv@gmail.com

WEPE0636 Contested sexual and reproductive rights of women living with HIV in Vietnam experience with health care providers and family members in sexual health decision-making

L. Mersersmith, K. Semrau, L.A. Tran, N.T. Nguyen, M.H. Dao, K. Effen, L. Sabri

1Boston University School of Public Health, International Health, Boston, United States, 2Center for Community Health and Development, Hanoi, Vietnam, 3University of British Columbia, School of Population and Public Health, Vancouver, Canada, 4, L. Sabin

Description: We sought to explore and understand the sexual and reproductive health needs of women living with HIV/AIDS (WLHIV) and to determine their preferences and experiences regarding reproductive health issues. This study was conducted in two parts: a cross-sectional survey and in-depth interviews. The CQI research team, led by a trained psychologist from the Ho Chi Minh City University of Medicine and Pharmacy, conducted a survey to understand the sexual health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services. We conducted a survey to understand the sexual and reproductive health needs of WLHIV and to inform the design of effective services.

Methods: Methods included survey interviews with 300 WLHIV and 40 health care providers. Peer leaders of WLHIV groups were trained to conduct inter- views. Results: Nearly 15% of the WLHIV reported that they wanted to have a child from their current relationship and that they would have wanted more children. Yet, over 40% of the 300 WLHIV interviewed reported that they were advised to abstain from sex. Results differed significantly by study site (50% and 31% reported be- ing advised to abstain from sex in Hai Phong and Ho Chi Minh City respect- ively; p=0.0009). 66% of the study participants reported the advice came from a health care provider and 32% reported the advice came from a family member. Over 17% of WLHIV reported that they had been advised to have an abortion. Of these women, 41% reported the advice came from a health care provider and 44% reported the advice from a family member. Of the 33 WLHIV clients who were told to have an abortion, their WLHIV clients to abstain from sex and 25% advise pregnant WLHIV to have an abortion.

Conclusions: Sexual and reproductive rights of WLHIV in Vietnam are often contested. Advice from providers and family members directly conflicts with some women’s own desires for children. WLHIV need to be informed of their sexual and reproductive rights and must have access to client-centered services to facilitate informed decisions. Health care providers and family mem- bers need to be trained and sensitized in sexual and reproductive health and rights of WLHIV.
WEPE0639
Pregnancies among women with known HIV infection—experiences from a private sector PMTCT project in Pune, Maharashtra, India

S. JadHAV, S. Darak, R. Parchure, A. Khergaye, S. Apte
Prayas, Health Group, Pune, India

Issues: Reproductive desires and aspirations of HIV infected women are likely to be affected with increase in availability of ART and PMTCT services. Understanding barriers and cultural factors influencing PMTCT is important.

Description: The Prayas-HIV-Positive Women’s Health Project has been working in Pune, Maharashtra India implementing PMTCT project since 2002. More than 1128 HIV infected pregnant women were provided cascade of PMTCT services. Over the years we observed that there were repeat registrations, and increasing number of women consciously deciding to have a child. Since 2006, we started collecting additional information from their reproductive claims. From August 2006 to January 2010, there were 193 women knew that they were HIV infected before their current pregnancy of these 62% reported to have planned their pregnancies. Knowledge about PMTCT protocol, desire to have a male child, death of previous children, non-disclosure of HIV status in the family and consequent family prejudice were the important reasons that induced the participants to become pregnant. Along with these, cultural barriers against termination of pregnancy were an important reason for continuation of pregnancy.

Lessons learned: Changes of PMTCT and survival because of availability of ART is an important factor for women to negotiate with the socio-cultural determinants of fertility.

Next steps: Strengthening the linkages between sexual and reproductive health and PMTCT services are urgently required.

Presenting author email: sanitaz17_jadHAV@hotmail.com

WEPE0640
Condom use among pregnant women living with HIV/AIDS in Porto Alegre, Brazil

1Federal University of Rio Grande do Sul, Postgraduate Program in Psychology, Porto Alegre, Brazil, 2Federal University of Rio Grande do Sul, Porto Alegre, Brazil, 3University of British Columbia, School of Population & Public Health, Vancouver, Canada, 4Conceição Hospital Contraception Service, Porto Alegre, Brazil

Background: Understanding HIV+ women’s sexual behaviour has important implications for public health (e.g., onward transmission) and personal health (e.g., antiretroviral effects of multiple STIs). However, limited data from Brazilian healthcare settings are available regarding sexual behavior among HIV+ women. This clinic-based survey identifies factors associated with condom use among HIV+ women.

Methods: The study used a cross-sectional design, whereby a 72-item survey was administered to 253 HIV infected women attending PMTCT clinics in Porto Alegre, Brazil. Median age was 28.5; mean number of years of education was 7.4, and 78% were married. All participants were receiving Mother-to-Child Transmission (MTC) treatment at recruitment; 65% (47) had already been diagnosed with AIDS (CD4 cell count ≤ 350 cells/µl). Both descriptive and multivariate analysis techniques were completed using SPSS.

Results: More than half (40; 55.6%) were diagnosed HIV+ during their current or previous prenatal care. There were 60 HIV+ participants who were currently sexually active (8%). All (59; 81%), except one, reported being in a long-term relationship. Of them, 14 (23%) had a partner with unknown HIV status and 27 (45%) said they knew their partner’s (s) HIV+ status. Always using a condom with all sexual partners was reported by 29 (48%) women and 39 (65%) reported using a condom during their last sexual intercourse. Most women (50; 81.3%) reported that their HIV diagnosis had had negative effects on their sexual lives (e.g., worries about transmission), although sero-discordance did not predict condom use. Consistent current condom use was lead likely among those who reported sexual debut before age 15 (AOR= 3.99, p<0.02).

Conclusions: Prenatal settings provide opportunities to promote condom use. However, consistent use remains a challenge for many HIV+ pregnant women. Message fatigue and/or lack of empowerment may pose barriers. Promoting interventions that also target partners/partners could be helpful.

Presenting author email: tanranrib@yahoo.com.br

WEPE0641
"Those are your HIV issues!" HIV-positive women’s experiences with reproductive healthcare services

B. Hersted1, B. Okundi2, P. Lawson3
1Futures Group, Washington, United States, 2Futures Group, Nairobi, Kenya, 3Futures Group, Glastonbury, United States

Issues: Like other women, HIV-positive women of reproductive age need access to high-quality family planning (FP) and reproductive health (RH) services. However, a growing body of global evidence suggests that HIV-positive women lack access to these services, including information. In Kenya, almost 60 percent of HIV-positive women have an unmet need for FP.

Description: An assessment was undertaken to understand HIV-positive women’s knowledge and experiences related to FP/RH in the Kininyaga district of Kenya. Group discussions were conducted with women and men in PLHIV support groups and representatives of national PLHIV networks, totaling approximately 80 participants.

Lessons learned: PLHIV reported a general understanding of FP, but demonstrated incomplete, inaccurate, or a lack of information from healthcare providers. As a result, HIV+ women are inclined to use safer contraception practices and effective pregnancy prevention options as requested.

Presenting author email: bhersted@futuresgroup.com

WEPE0642
Trends in the incidence of livebirth among HIV-positive and HIV-negative women in Soweto, South Africa: the influence of expanding access to highly active antiretroviral therapy (HAART)

A. Koid1, F. Laher1, S. Kanter1, D. Money1, P. Janssens1, B. Hogg2, G. Gray3
1University of British Columbia, School of Population and Public Health, Vancouver, Canada, 2University of British Columbia, Women’s Health Research Institute, Vancouver, Canada, 3Perinatal HIV Research Unit, Soweto, South Africa, 4Centre for Excellence in HIV/AIDS, Prayas, India, 5University of British Columbia, Obstetrics & Gynaecology, Vancouver, Canada, 6Simon Fraser University, Burnaby, Canada

Issues:
- Women who report fertility desires (AOR: 1.55; 95% CI: 0.96, 2.51). Younger women with lower parity and in a sexual relationship were also more likely to express fertility desires.
- Discussion: The diverse reproductive goals of HIV-positive women and their experience discussing pregnancy planning with HCPs highlight the desperate need for sexual and reproductive health guidelines that proactively support safer conception practices and effective pregnancy prevention options as requested.

Presenting author email: robert_hogg@sfu.ca

Lessons learned:
- PLHIV reported a general understanding of FP, but demonstrated incomplete, inaccurate, or a lack of information from healthcare providers. As a result, HIV-positive women are inclined to use safer contraception practices and effective pregnancy prevention options as requested.

Presenting author email: bhersted@futuresgroup.com

WEPE0643
Condom use among pregnant women living with HIV/AIDS in Porto Alegre, Brazil

1Federal University of Rio Grande do Sul, Postgraduate Program in Psychology, Porto Alegre, Brazil, 2Federal University of Rio Grande do Sul, Porto Alegre, Brazil, 3University of British Columbia, School of Population & Public Health, Vancouver, Canada, 4Conceição Hospital Contraception Service, Porto Alegre, Brazil

Background: Understanding HIV+ women’s sexual behaviour has important implications for public health (e.g., onward transmission) and personal health (e.g., antiretroviral effects of multiple STIs). However, limited data from Brazilian healthcare settings are available regarding sexual behavior among HIV+ women. This clinic-based survey identifies factors associated with condom use among HIV+ women.

Methods: The study used a cross-sectional design, whereby a 72-item survey was administered to 253 HIV infected women attending PMTCT clinics in Porto Alegre, Brazil. Median age was 28.5; mean number of years of education was 7.4, and 78% were married. All participants were receiving Mother-to-Child Transmission (MTC) treatment at recruitment; 65% (47) had already been diagnosed with AIDS (CD4 cell count ≤ 350 cells/µl). Both descriptive and multivariate analysis techniques were completed using SPSS.

Results: More than half (40; 55.6%) were diagnosed HIV+ during their current or previous prenatal care. There were 60 HIV+ participants who were currently sexually active (8%). All (59; 81%), except one, reported being in a long-term relationship. Of them, 14 (23%) had a partner with unknown HIV status and 27 (45%) said they knew their partner’s (s) HIV+ status. Always using a condom with all sexual partners was reported by 29 (48%) women and 39 (65%) reported using a condom during their last sexual intercourse. Most women (50; 81.3%) reported that their HIV diagnosis had had negative effects on their sexual lives (e.g., worries about transmission), although sero-discordance did not predict condom use. Consistent current condom use was lead likely among those who reported sexual debut before age 15 (AOR= 3.99, p<0.02).

Conclusions: Prenatal settings provide opportunities to promote condom use. However, consistent use remains a challenge for many HIV+ pregnant women. Message fatigue and/or lack of empowerment may pose barriers. Promoting interventions that also target partners/partners could be helpful.

Presenting author email: tanranrib@yahoo.com.br
WEPE0643
Acknowledging women’s sexual and reproductive rights: a key to the provision of more integrated and effective health care in the metropolitan area of Ho Chi Minh City
H.L. Coe1, H. Mariello, S. Fernández1
CEDIES, Health, Economy and Society, Ciudad Autónoma de Buenos Aires, Argentina, 1CENEP, Ciudad Autónoma de Buenos Aires, Argentina

Background: Understanding the experiences, decisions and practices of women with HIV infection regarding contraception, pregnancy and motherhood can provide insights to improve women's health and offer support for their integration.

Methods: The research design includes triangulation of quantitative and qualitative techniques. Descriptive quantitative analysis is based on a survey of 169 women attending the National Referral AIDS Center (CNRS) in 2009. Qualitative analysis is based on 17 semi-structured interviews with women taking their babies to be treated for HIV to CNRS (2010).

Results: Quantitative data indicates that 55% of interviewees do not want a (new) pregnancy and 42% would like to have children in the future. In the last sexual encounter, 80.5% of sexually active women who risk a pregnancy used a method to avoid it. 74% used condoms exclusively, 9.1% used condoms plus another contraceptive on 16% a method other than condoms (mostly, the pill). Only 55% of women visit a gynecologist. 29% of interviewees reported having addressed contraception or reproductive intentions with health professionals (mainly, infectious disease specialists). 12% of the 129 women who had heard about the “morning after pill” got this information from a healthcare provider (the media, friends and relatives were the main source of information). Qualitative data reveals that motherhood is frequently sought or welcomed and that it gives women strength to cope with the infection and/or adverse circumstances in their lives.

Conclusions: HIV infection is part of women’s lives and does not have a unique impact on sexual and reproductive behavior. Acknowledging women's needs and agency in this area is crucial to deliver more integrated health services while contributing to the fulfillment of their sexual and reproductive rights. Infectious disease specialists need to encourage women to visit a gynecologist, promote “double protection” and provide information on emergency contraception.

Presenting author email: monik54@yahoo.com.ar

WEPE0644
Gender-specific vulnerabilities and needs among women drug users in two cities of Northern Morocco: Tangier and Tetouan
K. Berr1, F. Assouab1, S. Sayai1, R. Eassa1
1Independent Consultant, New, United States, 2Ministry of Health, Rabat, Morocco, 3GTZ Rabat, Rabat, Morocco

Background: North Africa is experiencing growing numbers of injection drug users and a proliferation of localised concentrated IDU-driven epidemics, yet little is known about the dynamics of IDU epidemics in the region, and less about female drug use in the region. This study presents the first results of a study of women DU and IDU in two cities in Morocco with concentrated epidemics: Tangier and Tetouan.

Methods: The study, funded by GTZ-Rabat, documents interviews conducted in November 2007 with 52 women drug users, as well as key informant service providers in drug treatment services, harm reduction services, and prisons. Interviews were conducted in public places, in drug treatment facilities, unofficial brothels and in prisons.

Results: One third of study respondents injected drugs and the rest smoked or sniffed. The study documented a significant overlap between women’s drug use and street-based sex work in both Tangier and Tetouan, with 93% of women DU reporting sex work. It found high levels of awareness about parenthood, transmission of HIV but low levels of awareness about sexual transmission accompanied by significant sexual risk behaviours. Sexually transmitted infections were a problem for all study participants, although awareness of STIs was low. Reproductive health was also a very serious problem for all the women with nearly 80 percent experiencing stillbirth or infant death. Most women reported and harm reduction service providers were not able to attract significant numbers of women to their services, and those women who did attend drug treatment had no knowledge about sexual transmission routes.

Conclusion: There is an urgent need to make drug treatment and harm reduction services gender responsive in northern Morocco and particularly to provide women DU/IDU education on sexual transmission routes. Service providers who work with DU/IDU should provide reproductive health services especially for pregnant and parenting women.

Presenting author email: kaya@khumconsulting.com

WEPE0645
The pregnancy intentions of women living with HIV: moving forward the research agenda
S. Gruskin1, L. Ferguson1, J. Knoester2, S. MacCarthy2
1Program on International Health and Human Rights, Department of Global Health and Population, Harvard School of Public Health, Boston, United States, 2Department of Global Health and Population, Harvard School of Public Health, Boston, United States

Issues: Public health practice has been slow to address the sexual and reproductive health (SRH) needs of pregnant women living with HIV (WLHIV) beyond reducing vertical transmission of HIV. Assuming that an HIV diagnosis will obviate a woman’s childbearing desires has hindered even the research, policies and programmatic efforts that aim to address the needs and rights of WLHIV. Although the global majority of WLHIV are in their reproductive years, their pregnancy intentions remain poorly understood and addressed.

Description: An extensive assessment of peer-reviewed literature, discussing engagement with WLHIV and participation in conferences bringing together policymakers, researchers and advocates has highlighted the need for action and further research.

Lessons learned: To deliver a higher-quality constellation of SRH services for WLHIV and to ensure fulfilment of their reproductive rights, consideration must be given to women’s concerns before pregnancy and after becoming pregnant, for both desired and undesired pregnancies. The myriad biomedicai, social, cultural and legal issues that may influence the pregnancy intentions of WLHIV across their reproductive lives warrant sustained attention. These include: how and when women discover their HIV status; the HIV status of their sexual partner(s); the legal status of their sexual relationship(s); their access to both SRH and HIV-related services including contraception, assisted reproductive technologies and antiretroviral therapy; their interactions with health workers and the broader health system; social and cultural perceptions of HIV and motherhood; and the impacts of laws and policies on their access and use of services.

Next steps: To better secure the SRH and rights of WLHIV, a multidisciplinary research agenda is needed. This will provide a more complete understanding of how women’s reproductive health and rights can safely be fulfilled in the context of HIV, highlighting the insufficiencies of existing approaches and areas requiring further research and immediate action.

Presenting author email: smaccarthy@hsph.harvard.edu

WEPE0646
Fertility intent, contraceptive use and decision-making among HIV-positive and HIV-negative antenatal clinic attendees in Johannesburg, South Africa
H.M. Marlow1, S. Maman1, A.K. Groves2, D. Moodley3
1University Of North Carolina at Chapel Hill, Chapel Hill, United States, 2University of North Carolina at Chapel Hill, Health Behavior and Health Education, Chapel Hill, United States, 3University Of KwaZulu Natal, Women’s Health and HIV Research Unit, Durban, South Africa

Background: A majority of women at risk for HIV infection in South Africa are of childbearing age. Part of South Africa’s prevention of mother-to-child transmission program includes reducing unwanted pregnancies through modern contraceptive use in this population. Understanding fertility intentions
and contraceptive use is increasingly important for these women. This study explores contraceptive use and decision-making among antenatal clinic at- tendees for reasons of quality and quantity, and experiences of government health facilities.

Methods: We recruited 10 HIV negative and 8 HIV-positive women attending a government antenatal clinic. Women were interviewed in Zulu. Interviews were recorded, transcribed and translated into English. Qualitative analyses of interviews were conducted using inductive and deductive coding techniques.

Results: The conception of “family planning” meant more than just contracep- tive use; it included the planning, timing and spacing of pregnancies, and included family size, which varied widely. Most of respondents felt they had too many children, regardless of their HIV status. For HIV negative women, learning their status enhanced their motivation to remain negative and not become pregnant again. Women were the dominant decision-makers about contracep- tive use, whether they involved their partners or not. Both HIV-positive and negative women were motivated to use contraception after giving birth. A majority of women obtained an injectable method, pills, or condoms at a govern- ment facility; however, several women were unable to attain sterilizations. Other contraceptive methods were not available or discussed by facility staff, and women seeking abortions were unable to get them.

Conclusions: Women in this study were highly motivated to cease childbear- ing and use contraceptives, regardless of HIV status. Their decisions to avoid pregnancy and use contraceptives in a majority of cases were their own. Women were presented with limited contraceptive options and they were not always able to access needed reproductive health services. Presenting author email: mrmrhow@heliuc.uc.edu

WEPE0648 A systematic review of studies on intimate partner violence during pregnancy and risk of HIV infection in Africa

S. Shamy1, N. Abraham2, M. Temmerman3, C. Zarowski4
1University of the Western Cape, School of Public Health, Cape Town, South Africa, 2Medical Research Council, South Africa, 3Gender and Health Research, Cape Town, South Africa, 4International Centre for Reproductive Health, Gent, Belgium

Background: The twin pandemics of intimate partner violence (IPV) and HIV prevalence are highest in Africa. However, information obtained from the intervention studies of IPV in Africa has not been systematically gathered and analysed. This systematic review sums up the evidence, from original research conducted in Africa, on IPV prevalence, risk factors and re- lationship with HIV among pregnant women.

Methods: A key-word defined search of various electronic databases, specific journals, reference lists on IPV and HIV resulted in 19 peer reviewed journal articles which matched our inclusion criteria. Quantitative research articles published in English between January 2000 and January 2010 in which respondents were pregnant women were reviewed. At least two reviewers as- sessed each paper for quality and content.

Results: The mean sample size was 531 participants. The prevalence of IPV during pregnancy ranges from 2.3% to 57.1% (n=13 studies). IPV in the past 12 months and lifetime IPV ranges from 4.2%-43.4% and 37.4% to 65.4%, respectively. After adjustment for known confounders, five studies retained a statistically significant association between IPV and IV during pregnancy and showed that being diagnosed for HIV or testing HIV-positive increases chances of being abused by a partner whose status is different or unknown (minimum OR=1.48, maximumOR=3.1, averageOR=2.54). Three studies did not find a significant association. Four studies demonstrated strong evidence that the history of violence (abuse in childhood and in the past 12 months) is significantly associated with IPV in pregnancy. Alcohol abuse by a partner increases a woman’s chances of being abused (mean OR=3.55; n=5). Other risk factors include risky sexual behaviour, low educational level, domestic factors and young age.

Conclusion: Pregnancy related IPV is very high in Africa. More research with bigger sample sizes and uniform measurements is needed to understand the dynamics of HIV infection and IPV in pregnant women. Presenting author email: shamyts@yahoo.com

WEPE0649 Knowledge and attitudes of health care workers towards providing care and support for the sexual and reproductive health of HIV-positive women in Botswana

M. M. Schan1,2,3, M. Taylor2, N. Gungqisa1, L. Busang4, I. Chingombe4, R. Marlink1,3
1Botswana-Harvard Partnership, Gaborone, Botswana, 2University of KwaZulu Natal, School of Public Health, Durban, South Africa, 3Harvard School of Public Health, Marlink Group, Boston, United States, 4African Comprehensive HIV/AIDS Partnerships, Gaborone, Botswana, 5Botswana Ministry of Health, Gaborone, Botswana, 6Formerly Botswana Ministry of Health - ARV Program, Gaborone, Botswana

Background: As the HIV epidemic matures in Botswana, many women are taking anti-retroviral drugs and living longer - and many become pregnant. According to the recent Botswana HIV ANC Sentinel Survey, approxi- mately 22% of HIV-positive pregnant women were on HAART prior to preg- nancy. This study investigated health care worker (HCW) knowledge and at- titudes towards providing care and support for the sexual and reproductive health of HIV-positive women.

Methods: A 128 self-administered, confidential KAP surveys were distributed to health care workers at both ante-natal and ARV clinics in Gaborone, the capital city and Mochudi, a nearby peri-urban village.

Results: 195 KAP surveys were collected showing a response rate of 71%. The demographics of respondents were at all ages, and experienced in government health facilities.

Conclusions: Women who know they are HIV-positive before becoming preg- nant require special care. Health care workers should be trained in early detection and reproductive and sexual health so HIV-positive women desiring children or enrolling in the PMTCT programme receive comprehensive, non-judgmental care and support. Presenting author email: mmmschana@yahoo.com

WEPE0650 Communication between patients and providers about HIV and fertility in inner city Johannesburg.

S. Schwartz1, S. Mehta2, F. Venter3, H. Rees1, T.E. Taha1, V. Black1
1Johns Hopkins Bloomberg School of Public Health, Epidemiology, Baltimore, United States, 2Reproductive Health & HIV Research Unit, Johannesburg, South Africa

Background: A woman’s right to freely choose the number and spacing of her children, regardless of her HIV-status, is a basic human right. Maximaliza- tion of rights of these rights, particularly in HIV-infected populations, requires provider counseling to safely achieve desired reproductive outcomes. We describe communication between HIV-patients and providers regarding fertility, and reproductive knowledge among HIV-infected women.

Methods: Non-pregnant women on antiretroviral therapy (ART) aged 18-35 years were recruited for a prospective cohort study from four Johannesburg clinics during September 2009-January 2010. Baseline interviews spanned a variety of demographic, reproductive and behavioral topics, including interac- tions with HIV providers about fertility. We used logistic regression to assess predictors of patients regarding reproductive counseling and compared base- line differences in reproductive knowledge using chi-square statistics.

Results: Less than half (40.6%) of the 851 women enrolled reported that their providers had talked to outcomes of their reproductive health since starting ART treatment. While few providers are actively discouraging HIV-infected women from conceiving, our data suggest that counseling for reproductive care and support of these women is not adequate. Presenting author email: scarwtt@jhsph.edu

WEPE0651 Women in prison settings: the need of a sexual and reproductive approach for HIV and other STIs prevention and attention

M.C. De Azaguirre Ureta1, A. González Rodríguez2, J. Arellano- Ayala3, R. Gras Algira, S. Bautista4
1Mexico City HIV/AIDS Program, Vicedirección de Prevención, México City, Mexico, 2Clinica Especializada en HIV/AIDS Condesa (México City AIDS Program), Prevención, México City, Mexico, 3Instituto Nacional de Salud Pública de México, México City, Mexico

Issues: In Mexico City, approximately 2,500 women live in prison. Inside and outside prison, they suffer from high levels of social conditions as marginalization, gender inequity, the exposure to different types of violence (sexual, economi- cal, domestic, and psychological), poverty, economical dependence and so. These issues place women in a situation of high vulnerability and, as a conse- quence, in a high risk of acquiring HIV and other STIs, including HPV.

Description: The Mexico City HIV/AIDS Program faces the problem through a project with three components: detection of TB, HIV, syphi- lis, herpes, HBV, HCV and metabolic disorders; prevention of new infections. After visiting the women penitentiaries, it was noticed that inmates mainly suffer from psychosocial stress, inadequate health conditions as overcrowding, bad hygiene and bad feeding; lack of basic medicines and periodical monitoring; deficient health services and difficulties to access them -caused by legislation and facilities.

Lessons learned: The project must to include specific illnesses with the aim of integrating sexual and reproductive health services. Only one of the two peniti- tentiaries has health service but none of them addresses HIV and other STIs prevent
and sexual and reproductive services. There are difficulties to access to basic medicines and to be taken to the hospital if an emergency happens.

Next steps: To favor the access to Health Services with quality and friendly treatment including confidentiality and informed consent for all the inmates of Santa Maria and Tepepan women jails in order to assure their sexual and reproductive rights. Detection and treatment of HIV and other STIs including HPV, treatment of damages; breast and/or cervical cancer; menstrual disorders and nutritional problems, as anemia, for example. To implement the reproductive health (abortion, pregnancy monitoring, condoms and other anticonception methods), access to quick hospitalization, surgery related to women cancer, etc.

Presenting author email: crisminadeacarraga@gmail.com

WEPE0652
A comparison of sexual functioning between persons with and without HIV infection illustrates the need for expanded prevention efforts

E. Shacham1, M. Donovan2, P. Souza2, N. Onen1, E.T. Overton1
1Washington University, Social Work, St. Louis, United States, 2Washington University School of Medicine, Infectious Diseases, St. Louis, United States

Background: Much research has examined sexual behavior in the context of HIV transmission risk, yet little has considered the role of sexual function among this population. An important role in prevention is the impact HIV-infected individuals may have on their sexual partners. These analyses were conducted based on the work previously conducted in the field of sexual function and cancer survivorship. We hypothesized that HIV may have similar associations with sexual function that has been reported in other chronic disease cohorts.

Methods: We compared our study findings of 203 HIV-infected individuals from a publicly funded urban US HIV clinic compared to normative data from sexual function scales to HIV population and compared to the general population. Individuals with higher overall sexual function reported higher overall health status and those who were diagnosed with post-traumatic stress disorder and expressed depressive symptoms had lower sexual function (p< 0.05 for all). Overall sexual function did not differ by gender or expressed stigma. Compared with the HIV-negative cohort, mean sexual function was lower among individuals with HIV among all subscales (Overall Sexual Function, Interest, Desire, Arousal, Orgasm, Relationship, Activity, Problems, and Medical Impact), except Masturbation, which was higher functioning among the HIV-infected group.

Conclusions: These findings suggest sexual function impacts HIV-infected populations in ways that were previously unexpected or unexamined. Further research is needed to increase understanding of the impact on HIV transmission risk.

Presenting author email: eshacham@wustl.edu

WEPE0653
The Uganda HIV and AIDS Control and Prevention Bill 2008: PLHIV involvement vital

R. Serunkuma1, F. Nqawala2, J. Lule3
1The Positive Men’s Union (POMU), Kampala, Uganda, 2The Natl. Forum of PLHIV Networks in Uganda, NAPOPHANIL, Advocacy Department, Kampala, Uganda, 3Kampala District Forum of PLHIV Networks, KADFO+, Kampala, Uganda

Issues: Uganda Government through the Uganda AIDS Commission and the Law Reform Commission came up with a draft HIV and AIDS Bill 2008 which if passed in its current form will hamper successes so far registered because of its shortcomings. It does not address core issues of HIV prevention and treatment, human rights and related issues international and sub-national as the GIPA MIPA Principle and the National AIDS Strategic Plan. It is insensitive to the needs of young people living with HIV/AIDS and affected by AIDS and also to create a platform and strengthen the voices of YPLWHA to advocate for their rights there by contributing towards the achievement of the Millennium Development Goals. It is insensitive to the challenges of health, and social needs for young people were also implemented in this dialogue. Economic empowerment programmes were also provided through partnership linkages. Advocacy programmes were organized to build support systems for young people living with HIV/AIDS at the state level from Government and Development partners.

Lessons learned: This paper presents some of the key achievements the Dialogue has achieved in addressing the complicated issues and needs of YPLWHA in their everyday lives, primarily in relation to their occupation and the insurance business. In order to combat discrimination not just on an individual but also on a group level, it is important to monitor all cases of discrimination and to report them to governmental bodies.

Description: The Uganda AIDS Federation (SAF) serves as a notification centre for all cases of discrimination faced by plwha in Uganda. Per year, around 80 cases of discrimination are reported. Areas most affected are: private and social insurance, privacy and data protection, medical setting.

Some specific examples:
- Working ban for HIV-positive engine drivers issued by Swiss rail.
- Refusal of acupuncturists to treat plwha.
- Dismal of HIV-positive restaurant workers for fear of transmission.
- In all these cases, effective action could be taken against the discrimination.

Next steps: A peer-led Youth Dialogue enables empowerment of YPLWHA. Capacity building programmes framed on the needs of YPLWHA will develop them as advocates and facilitate reduction in stigma and discrimination.

There is need for Youth Dialogue to be strengthened and empowered by ongoing capacity building programmes and advocacy.

Presenting author email: yepolwhan@yahoo.com

WEPE0655
Monitoring and reporting discrimination: a cooperation between non-governmental and governmental bodies

C. Suter
Aids-Hilfe Schweiz / Swiss AIDS Federation, Zurich, Switzerland

Issues: Although there is no systematic discrimination against plwha at the legal level in Switzerland, plwha experience discrimination in their everyday lives, primarily in relation to their occupation and the insurance business. In order to combat discrimination not just on an individual but also on a group level, it is important to monitor all cases of discrimination and to report them to governmental bodies.

Description: The Swiss AIDS Federation (SAF) serves as a notification centre for all cases of discrimination faced by plwha in Switzerland. It reports these cases twice a year to the Swiss National AIDS Commission (SNAC), a standing extra-parliamentary commission with a consultative remit. Besides reporting the cases, the SAF aims at solving and implementing suitable measures to prevent discrimination. Per year, around 80 cases of discrimination are reported. Areas most affected are: private and social insurance, privacy and data protection, medical setting.

Some specific examples:
- Working ban for HIV-positive engine drivers issued by Swiss rail.
- Refusal of acupuncturists to treat plwha.
- Dismissal of HIV-positive restaurant workers for fear of transmission.
- In all these cases, effective action could be taken against the discrimination.
- Swiss rail, for example, eliminated the discriminatory exclusion of plwha after a joined intervention by the SAF and the SNAC.

Lessons learned: Monitoring and reporting discrimination lay the groundwork for an efficient fight against discrimination. Based on the cases monitored and reported, working groups can be set up, preventive intervention can be planned, the media can be involved, etc.

Next steps: As there has been an increase of discrimination in the field of insurance and criminalisation, two working groups consisting of experts from governmental and non-governmental organisations, research, medicine, etc. shall be set up to develop concrete actions and measures to tackle the widespread discrimination experienced by plwha in these areas.

Presenting author email: caroline.suter@ aids.ch
WEPE0656
The 'infected innocent': gender roles and stigma among women living with HIV in Vietnam

A. Pharris1, C. Tischelman2, D.T. Huyen3, N.T.K. Chuc3, A. Thorson1
1Karolinska Institutet, Public Health Sciences/Division of Global Health (DHCAr), Stockholm, Sweden; 2Karolinska Institutet, Department of Learning, Informatics, Management and Ethics (LIME), Stockholm, Sweden; 3Hanoi Medical University, Health Systems Research Project, Hanoi, Vietnam

Background: In countries, like Vietnam, with concentrated HIV epidemics, research and prevention activities are typically focused on groups directly engaged in the most high-risk behaviors, such as commercial sex work (CSW) and intravenous drug use (IDU). Due to the very highly stigmatized nature of these risk behaviors in the Vietnamese setting and differing expectations of women's and men's societal roles, HIV infection carries an incredibly heavy burden for women. Most research, to-date, has focused on men living with HIV or on female sex workers. This qualitative study explores the manner in which women living with HIV in Vietnam negotiate HIV-related stigma in light of their expected gender roles within family and society.

Methods: Twelve face-to-face qualitative interviews were performed with women living with HIV in and around Hanoi. Interviews focused on how women negotiated HIV-related stigma. Interpretive description was used for data analysis.

Results: Major findings relate to how women enacted gender roles in family and society to negotiate HIV-related stigma. Participants emphasized moral identity and concepts of HIV infection as destiny to distance themselves and their families from HIV-related stigma and the 'social evils' of IDU and CSW. However, this sometimes led participants to stigmatize other persons living with HIV (PLHA), particularly those engaging in IDU or CSW, and appeared to heighten the risk of not receiving, interpreting, or enacting HIV prevention services. Women highlighted the importance of protecting others by taking extreme precautions in daily household contacts or through not disclosing their HIV status to others. This protection of others was dually important in empowering in protecting themselves from HIV infection or any form of discrimination: an analysis on the most comprehensive PLWHA led research on HIV/AIDS related discrimination in China?

W. Jin
Chinese Central Party School, Institute of Social Development Research, Beijing, China

Background: Stigma/discrimination has been one major challenge in realizing universal access to HIV/AIDS services and an infringement of the rights of PLWHA. Being pioneer in similar research, in terms of scale or coverage and the characteristic of PLWHA led, this study explores the severity of HIV/AIDS related discrimination in China, in particular the situation of positive women.

Methods: 48 trained PLWA (35% female) participated fully in the study, from research design, data collection and compilation to report writing. Based on gender, ethnicity, geographical location and route of infection, 2,096 PLWHA (31.9% female) from 25 provinces were sampled randomly and non-proportionally.

Result: 1. Stigma/discrimination against PLWHA was serious in China, especially for positive women.

a. 2. When positive status was exposed:
   a. experienced being discriminated (average rate: 41.65%, male: 35.95%, female: 53.05%)
   b. thought of committing suicide (average rate: 46.6%, male: 43.8%, female: 52.6%)
   c. had marital problem: e.g. being deserted (average rate: 15.5%, male: 13.9%, female: 20.4%)
   d. experienced particular financial difficulties (average rate: 60.3%, male: 58.2%, female: 61.6%)
   e. rights violated (average rate: 23.7%, male: 22.3%, female: 26.6%)

Conclusions: In China, women are unusually disadvantaged because of the traditional male dominance culture. From this study, the following factors also contribute to the extra difficulties faced by positive women:

1. Low education level.
2. Lack of awareness: 53.8% female respondents not aware of their positive status and only 23.4% positive pregnant women received prevention of mother-to-child transmission.
3. Low level of understanding and awareness on their own rights:

The Chinese Government is attempting to give the special difficulties posed onto women infected. Girls and women should have equal opportunities to education and employment. While related legislation is important, it is equally essential to ensure the enforcement of legislation so that women can be truly empowered in protecting themselves from HIV infection or any form of discrimination.

Presenting author email: Jinweili0330@hotmail.com

WEPE0658
Measuring stigma and discrimination amongst people living with HIV/AIDS in China

J. Li1, Y. Wang2, H. Warren3, G. Taylor4
1Marie Stopes International China, Programme Department, Bei Jing, China; 2Marie Stopes International China, Bei Jing, China; 3UNAIDS, Bei Jing, China

Background: HIV related stigma and discrimination have been identified internationally as a major barrier to HIV control and prevention. The China Stigma Index Survey aims to document the experiences of people living with HIV (PLHIV) related to stigma, discrimination and violation of rights in order to inform future discussions, programmes and policies in China.

Methods: The survey was administered by members of the Positive Talks project who are all PLHIV to 2096 PLHIV across 25 provinces in China. Non-proportional quota sampling based on gender, province, residence (urban or rural hukou) and mode of HIV transmission was used.

Results: 41.7% of respondents reported having faced some form of HIV-related discrimination. Stigma was the biggest barrier for people living with HIV nearly one in six said they had been refused employment or a work opportunity because of their HIV status. 32% of respondents had their status revealed to someone else without their permission while 15.3% reported a healthcare professional revealing their status to others without their permission. 38.8% had been aware of being gossiped about because of HIV status. As a result of their status 55.4% had avoided attending social gatherings and 58.1% had isolated themselves from friends and family.

Conclusions: The findings of the survey show that stigma and discrimination remains a problem for PLHIV in China. More steps need to be taken to address it, especially in terms of implementation of existing policies and laws to prevent stigma and discrimination against PLHIV and their family members in the workplace, the educational and health care system. It also underscores the importance of ensuring that health care professionals receive appropriate training to reduce stigma and discrimination against PLHIV to the confidentiality of their status and increase ability to provide appropriate services to people living with HIV.

Presenting author email: lijing@youandme.net.cn

WEPE0659
Psycho-social predictors of the way of coping with HIV related stigma

M.J. Fuster, F. Molero
Universidad Nacional de Educacion a Distancia (UNED), Psicologìa y de las Organizaciones, Madrid, Spain

Background: The main objective of this research is to explore the strategies used by HIV+ people to cope with HIV-related stigma and to analyze the predictors of these strategies.

Methods: A correlational study was conducted in Spain between April and September of 2009. A total of 557 HIV+ people participated in the study, 70.8% men, 28% female and 1.3% transgender participated in the research. We assessed several variables related to the HIV-related stigma such as: perceived stigma, group identity, perceived self-efficacy to cope with stigma and coping strategies. Coping strategies were measured with a scale based on the theory of stress and coping.

Results: Results showed that HIV+ people use different ways to cope with HIV-related stigma. The most frequent used strategies were the “Secondary Coping strategies” (i.e. cognitive restructuring) (M=2.88; SD=0.48, in a 4-point Likert scale), the “Disengagement Coping strategies” strategies (M=2.78; SD=0.77), the “Primary Control Coping” (i.e. collective action) (M=2.38, SD=0.69).

Conclusions: We didn’t found significant differences by gender in the use of these strategies. Regression analyses show the positive influence of group identity, personal perceived stigma and self-efficacy and the negative influence of disclosure concerns, in the use of “Primary Control coping strategies”. We found also that perceived stigma, self-efficacy and group identity predicted positively the use of “Secondary Control strategies”. On the other hand the use of “Disengagement coping strategies” was positively predicted by disclosure concerns and negatively by the existence of a negative self-image.

Conclusions: The different dimensions of perceived stigma, self-efficacy to cope with HIV-stigma and the group identity, may play an important role in order to choose one of other coping strategies. In our opinion this information is very important in order to design interventions with the objective to empower HIV+ people to successfully cope with their stigma.

Presenting author email: fuster.mariajose@gmail.com

WEPE0660
Patterns of HIV/AIDS related stigma and discrimination in Western India, a concentrated epidemic setting

N. Rao1, A. Joy1, S. Kumar1
1Avert Society, Research, Mumbai, India; 2Avert Society, Mumbai, India; 3United States Agency for International Development, New Delhi, India

Background: HIV/AIDS related stigma and discrimination overlap the stigma associated with sexuality, gender and poverty. These are exacerbated with fear of death, punishment and guilt. A study was undertaken in Maharashtra State to understand HIV/AIDS related stigma and discrimination in general community and health care providers.

Methods: Ninety-seven in-depth interviews and twenty-nine focus group discussions were conducted among People Living with HIV/AIDS (PLHAs), general population and health care providers in three districts of Maharashtra State; Mumbai, Sangli and Nagpur.

Results: 46% among general population blamed sex workers and truckers for
WEPE0661
HIV/AIDS related stigma and discrimination in Croatia
S. Belak Kovačević, S.A. Solt2, T.E. Novotny3, J. Begovac4
1University Hospital for Infectious Diseases, Zagreb, Croatia, 2Drexel University College of Medicine/Hahnemann University Hospital, Department of Emergency Medicine, Philadelphia, United States, 3Graduate School of Public Health, San Diego State University, Division of Epidemiology and Biostatistics, San Diego, United States, 4University of Zagreb School of Medicine, University Hospital for Infectious Diseases, Zagreb, Croatia

Background: Several cases of HIV-related discrimination became known in Croatia in recent years. To gather quantitative data we examined the patterns and levels of HIV/AIDS related stigma and discrimination from different sectors experienced by Croatian people living with HIV (PLHIV).

Methods: This is a cross-sectional descriptive study of 160 HIV-infected adults who came for the routine follow-up care at the HIV/AIDS Center at the University Hospital for Infectious Diseases. Each participant was interviewed in person using a structured HIV/AIDS inventory based on 8 dimensions of discrimination as described in the UN Declaration on Human Rights. Data were collected (August 2007-February 2008) and analyzed for the prevalence of discrimination overall and in specific major areas.

Results: Overall, 82% of respondents reported experiencing some form of discrimination. Within the health sector, 49% of PLHIV faced discrimination, however, among those who declared their HIV status to a health care worker 72% experienced discrimination. HIV-related discrimination was less frequently found in the community (19%) and within the family (9%). When the HIV-related discrimination was less frequent (48%), individuals experienced discrimination in their workplace. Breaches in HIV testing procedure and of confidentiality by health care workers were common.

Conclusions: It is found that HIV-related discrimination is prevalent in every sector of society in Croatia. The major area of discrimination is within the health care sector which might discourage PLHIV from seeking health care as well as to disclose their HIV-status. Our findings may be used to raise awareness and responsibility among medical professionals and to sensitize the general public to this issue. Anti-discrimination laws and regulations governing violation of human rights should be implemented for monitoring. PLHIV should be empowered to address these issues and cope with discrimination.

Presenting author email: sanja.belakkovaцевic@gmail.com

WEPE0662
The role of stigma and discrimination on the health and well-being of PLWHA receiving ongoing clinical care in Brazil: advances and challenges within the context of universal access to HIV treatment
D. Kerrigan1, M. Malta2, N. Betroni3, F. Bastos4
1Group Health Research Institute, Seattle, WA, United States, 2University of Rio de Janeiro, Brazil, 3University Hospital for Infectious Diseases, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

Background: Stigma and discrimination are critical drivers of the HIV epidemic globally and care aspects of collective and individual-level vulnerability to poor health among PLWHA. Brazil has made tremendous progress in tackling stigma and discrimination by developing and implementing a human rights framework to guide their national HIV prevention and treatment program, which has become an internationally recognized model for other lower and middle income countries. Limited empirical research has been conducted on stigma and discrimination among PLWHA in Brazil within the context of universal access to treatment.

Methods: Structured surveys were conducted with a sample of 900 PLWHA attending 6 large public health clinics for ongoing clinical care in Rio de Janeiro, Brazil. Both psychosocial and structural aspects of participants’ health and well-being were evaluated. The Berger HIV Stigma Scale was adapted and an HIV-related perceptions scale was developed utilizing reliability and factor analysis. The relationship between stigma and discrimination and HIV-related outcomes was tested using bivariate and multivariate regression analysis.

Results: Almost one third (32.6%) of participants reported suffering some form of discrimination related to their HIV status, 10% had been subjected to a physical attack, 15% had stated that they lost their job in relation to HIV. Our adapted aggregate measure of perceived stigma was found to be reliable (Alpha=.78) and valid. Additionally, significant inverse associations between stigma and discrimination and positive HIV-related prevention and care outcomes were detected.

Conclusions: Important advances in combating stigma and discrimination have been made in Brazil relative to other countries. However, our study findings indicate gaps in service delivery and social mobilization which must be addressed. Additional research is needed to discern whom to trust about HIV issues and how this might continue to serve as an example of how a human rights perspective can advance the health of PLWHA for other countries.

Presenting author email: dkerriga@jhsph.edu

WEPE0663
Discrimination: a major barrier in Vietnam
D. Tzan Hug1, T.M. Nguyen
1AIDS Healthcare Foundation, AHF Vietnam, Hanoi, Vietnam

Issues: Despite progressive education on HIV transmission and prognosis in the era of antiretroviral therapy, fear of discrimination still exists in rural communities in northern Vietnam, where the prevalence of HIV is high. The goal of the study was to determine the correlation between HIV-infected patients’ fear of discrimination and their willingness to access health care. Description: Patients who enrolled in one of four outpatient clinics located in the four provinces of Vietnam were surveyed between September 2008 and August 2009. 489 patients took the written survey. Patients were asked to respond to a series of questions to assess their perception of the HIV stigma and the level of fear associated with this discrimination and comment on how this influenced their decision to seek care and their subsequent clinic follow-up.

Results: 427 of 489 (87.3%) respondents expressed fear of being stigmatized and felt discriminated by others who know or may know of their status. 385 (78.9%) subjects felt that their families were afraid that others would shun them if they knew of their HIV status. 34% of respondents reported that women were blamed for moral character and transmittable infection. 3 Graduates who enrolled in one of four outpatient clinics located in the four provinces of Vietnam were surveyed between September 2008 and August 2009. 489 patients took the written survey. Patients were asked to respond to a series of questions to assess their perception of the HIV stigma and the level of fear associated with this discrimination and comment on how this influenced their decision to seek care and their subsequent clinic follow-up.

Results: 427 of 489 (87.3%) respondents expressed fear of being stigmatized and felt discriminated by others who know or may know of their status. 385 (78.9%) subjects felt that their families were afraid that others would shun them if they knew of their HIV status. 34% of respondents reported that women were blamed for moral character and transmittable infection.

Conclusions: The literature on HIV-related stigma illustrates the various experiences of people living with HIV (HIV/LPWHA) and the contexts in which these occur. However, studies of stigma related to HIV in a new context. It is possible that this stigma is usually not directly comparable with research exploring stigma experienced by HIV-negative or serostatus unknown people. To bring together these separate bodies of literature and provide a comprehensive assessment of the different

Presenting author email: neeta@avertsociety.org

WEPE0664
Prevention information barriers in the context of living with HIV in a prison setting
S. Catz1, L. Thibodeau2, D. Seal3, K.R. Amico5, L. Thibodeau2, J. Blue Spruce1, S. Yard3, D. Seal4, K.R. Amico5, L. Thibodeau2, J. Blue Spruce1
1Group Health Research Institute, Seattle, WA, United States, 2University of Washington, Seattle, United States, 3Medical College of Wisconsin, Center for AIDS Intervention Research, Milwaukee, United States, 4University of Connecticut, Storrs, United States

Background: Prevalence estimates indicate 20-26% of HIV+ people in the US are incarcerated each year. Given the potential importance of correctional settings in HIV prevention efforts, it is important to identify and address structural and social barriers to HIV-related services in prisons.

Methods: Purposive sampling was used to recruit 30+1 HIV+ individuals (20 men, 10 women) who were incarcerated in state prisons in the US to participate in an individual qualitative elicitation interview via a private telephone in the prison health unit. Interviews were recorded, transcribed, and thematic content coded.

Results: The most prominent prison context barriers to obtaining prevention-related information were the role of stigma and privacy concerns. Difficulty discerning whom to trust about HIV issues exacerbated social isolation and diminished information-seeking during incarceration. Some indicated difficulty finding a private time and place in prison to read sensitive HIV materials. This was viewed as important because of stigma and safety concerns related to inadvertent HIV disclosure. Others did not feel it is safe to have written information about HIV or medical papers in their possession. These structural and social barriers are important given prevention-related knowledge gaps observed. Informational deficits were related around transmission risk with an undetectable viral load, when condoms are used, and in the context of oral sex, kissing, and sex between two HIV-positive partners. A majority number had questions about transmission risks involving non-sexual saliva, urine, and inadvertent blood exposure (e.g., through a sports injury).

Conclusions: In light of the prevention-related knowledge gaps observed, structural and social factors impeding receipt of HIV-relevant information in prison are of critical concern. Structural and social barriers to receiving prevention-related information may undermine the prevention education opportunities afforded by incarceration and should be a targeted focus of prevention efforts delivered within the prison system.

Presenting author email: bluespruce@jghc.org

WEPE0665
HIV-related stigma in gay and other men who have sex with men in Australia: foremost a matter of a serostatus-based sexual divide
J. de Wit1, D. Murphy2, S. Donohoe3, P. Adam4
1University of New South Wales, National Centre in HIV Social Research, Sydney, Australia, 2Utrecht University, Dept. of Social and Organizational Psychology, Utrecht, Netherlands, 3Australian Federation of AIDS Organizations, Sydney, Australia, 4Institute for Prevention and Social Research, Utrecht, Netherlands

Background: The literature on HIV-related stigma illustrates the various experiences of people living with HIV (HIV/LPWHA) and the contexts in which these occur. However, studies of stigma related to HIV in a new context. It is possible that this stigma is usually not directly comparable with research exploring stigma experienced by HIV-negative or serostatus unknown people. To bring together these separate bodies of literature and provide a comprehensive assessment of the different

Presenting author email: dkerriga@jhsph.edu
dimensions of HIV-related stigma, we conducted an anonymous online survey that directly compared responses of people living and not living with HIV. Methods: A random internet survey of adults recruited from 1 December 2008 to 31 January 2010. Over 1,350 respondents were recruited through banners on a range of websites and emails to the constituencies of HIV and gay community organisations. The majority of respondents to the survey were gay or other men who have sex with men and analyses were restricted to this sample of 1,260 respondents; 17.0% were HIV-positive, 72.6% were HIV-negative and 10.4% did not know their HIV-status. We asked respondents regarding stigma related attributions (e.g., blame, shame), negative feelings, social distancing, and sexual exclusivity compared to heterosexual partners, sexual attraction to negative and non-status unknown men). Responses were given on 5-point scales; higher scores indicated higher stigma. Stigma subscales were highly reliable (alphas .84-.90).

Results: HIV-positive men experienced low levels of stigmatising attributions (Mean±SD=1.1±0.9) and social stigma (Mean±SD=1.8±1.0) compared to their HIV-negative counterparts (Mean±SD=1.3±0.9 and 2.1±1.2, respectively). These men experienced moderate levels of negative emotional reactions (Mean±SD=2.3±1.3), and, in particular, exclusivity as sexual or romantic partners (Mean±SD=2.8). Stigma expressed by HIV-negative and status unknown men was highly comparable with the experiences of HIV-positive men (M=1.5, M=1.6, M=1.7, M=2.9, respectively).

Conclusions: HIV-related stigma in MSM is most tangible in the sexual/romantic domain. The ongoing adoption of serostatus-based risk reduction strategies may exacerbate this serostatus-based sexual divide in the gay community. Presenting author email: j.dewitt@unsw.edu.au

WEPE0666
Experiencing discrimination when information and support needs are unmet: results from the Eurosupport 5 study
C. Neостлингет, D. Rojas Cabrero, T. Platteau, The Europsupport 5 Study Group

Institute of Tropical Medicine, Microbiology, Antwerp, Belgium, 3AIDES, Paris, France, Institute of Tropical Medicine, Clinical Sciences, Antwerp, Belgium

Background: Sexuality, child desire, and prevention are important topics in HIV service provision, yet difficult to tackle for service providers and people living with HIV (PLHIV). This European study aimed to evaluate the relationship between addressing sexual and reproductive-health (SRH) topics and discrimination experienced in healthcare settings.

Methods: A sample of 1549 PLHIV (75% men, 25% women) from 14 different European countries participated between 03-10/2007 in an anonymous survey assessing socio-demographics, health status, sexual behaviour, drug and alcohol use, and support needs. Performing logistic regression analysis, we identified factors associated with perceived discrimination by health care providers (HCPs) during the last 3 years.

Results: 464 people reported being discriminated against, 46.6% by HCPs. Among them 67% were men, 47.3% were homosexuals, 46.5% were heterosexuals, and 14.6% were migrants. Logistic regression showed that factors associated with reporting discrimination by HCP (doctor, gynaecologist...) were being a woman (OR: 0.5; IC: 0.2-0.9; p<0.05), not being a migrant (OR: 1.08±0.72; p<0.05), having been pressured, forced or intimidated into sexual practices; 17.0% were HIV-positive, 72.6% were HIV-negative and 10.4% did not know their HIV-status. We asked respondents regarding stigma related attributions (e.g., blame, shame), negative feelings, social distancing, and sexual exclusivity compared to heterosexual partners, sexual attraction to negative and non-status unknown men). Responses were given on 5-point scales; higher scores indicated higher stigma. Stigma subscales were highly reliable (alphas .84-.90).

Results: HIV-positive men experienced low levels of stigmatising attributions (Mean±SD=1.1±0.9) and social stigma (Mean±SD=1.8±1.0) compared to their HIV-negative counterparts (Mean±SD=1.3±0.9 and 2.1±1.2, respectively). These men experienced moderate levels of negative emotional reactions (Mean±SD=2.3±1.3), and, in particular, exclusivity as sexual or romantic partners (Mean±SD=2.8). Stigma expressed by HIV-negative and status unknown men was highly comparable with the experiences of HIV-positive men (M=1.5, M=1.6, M=1.7, M=2.9, respectively).

Conclusions: HIV-related stigma in MSM is most tangible in the sexual/romantic domain. The ongoing adoption of serostatus-based risk reduction strategies may exacerbate this serostatus-based sexual divide in the gay community. Presenting author email: j.dewitt@unsw.edu.au

WEPE0667
Where’s the empowerment? The experience of people living with HIV in Serbia: citizenship, stigma and hope
S. Bernagić, T. Rhodes, K. Jankovic Terzić,
London School of Hygiene & Tropical Medicine, Public Health and Policy, London, United Kingdom, 2London School of Hygiene & Tropical Medicine, London, United Kingdom

Background: With the sustained health improvements among many people living with HIV/AIDS (PLWHA), the role of social and medical welfare, greater emphasis is being placed on community empowerment initiatives. This is underpinned by an expectation that treatment that is experienced as empowering ‘treatment empowerment’, which encourages increased social activism amongst PLHIV in efforts to combat stigma. This collective activism may contribute to the Emergy Barometer Survey 2009 (1). This paper examines the constructs between the experience of empowerment and local experience through a qualitative case study from residents of 7 localities in Serbia.

Methods: Between 2005 and 2008 we undertook qualitative longitudinal research with PLHIV in Serbia. We draw here on the thematic and narrative analysis of 100 interviews with 22 respondents from 20 participating localities.

Results: The findings suggest that, despite treatment availability, multiple individuals remain in reducing stigma by empowerment PLHIV through social activism. At an individual level, economic hardship undermines voluntarism and prioritising invisibility through non-disclosure, over open activism, remains a pragmatic priority. At a community level there is a fractured identification with other PLHIV and, with notable exceptions, a wary consciousness that leads to weak motivation to engage in a ‘damaged’ civil society. In addition, engagement with the traditional political arena is hindered by a lack of resources to serve as a cleavage in further separating PLHIV from their local communities.

Conclusions: By exploring the accounts of PLHIV, including of those who are better empowered and active, we can learn the broader influence of hope-lessness) in managing HIV stigma and the opportunities for employing alternative strategies to reduce stigma in the current context. The case study concludes against the expectation that treatment will necessarily produce HIV commu-nity empowerment by highlighting the experience of those who continue to feel silenced. Presenting author email: sarah.bernays@lshtm.ac.uk

WEPE0668
Gay and lesbian community attitudes to PLHIV and disclosure
J. Gjorslev, M. Ptits, A. Smith
La Trobe University, Australian Research Centre in Sex, Health and Society (ARCSHS), Melbourne, Australia

Background: Debates about GLBTI community perceptions of HIV-positive people and perceptions around disclosure are situated within a broader discourse of HIV stigma.

Methods: A self-complete survey administered in 2009 at gay and lesbian community events in Victoria, Australia. The Instrument included demographics and attitudinal items about HIV-positive people and expectations and disclosures of HIV.

Results: Sample size was 1,288 (630 gay/bisexual men and 658 lesbian/bi/sexual women). Mean age was 37.52%. 57.2% of men and 73.5% of women were in regular relationships. 57.5% of men and 16% of women had had an HIV test in the previous year and 7% of men and 1% of women were HIV-positive. 52% of men and 26% of women had HIV-positive peers. When asked whether they would be comfortable having a sexual relationship with a person with HIV, men were more comfortable (49.4% VA: 38%; p<0.001). HIV+ve more than HIV-ve/unknown (X=180; p<0.001) and older than younger (X=43; p<0.001). Similar results were found for romantic relationships. High levels believed there were legal, moral and community obligations to disclose HIV status to sexual partners (67.9%, 66% and 87% respectively). In multinomial logistic regressions that included age, gender, HIV status, relationship status and having HIV-positive peers as predictors of disclosure obligations, only having HIV-positive peers remained an independent predictor for all forms of obligations; participant HIV status a predictor for legal and moral obligation; gender a marginal predictor for legal obligation (Legal: X=9.11; Community X=58.59; Moral X=64.17; all p<0.001).

Conclusions: The findings provide a starting point for discussions about community attitudes around issues of HIV disclosure. Presenting author email: j.gjorslev@latrobe.edu.au

WEPE0669
HIV-related stigma and food insecurity among men and women accessing ART in rural Uganda
A. Tsai1, D. Bangsberg1, E. Frongillo, J. Senkungu, N. Emenyenyi2, A. Kawuma3, P. Hunt1, J. Martin1, S. Weiser4
1University of California at San Francisco, United States, 2Harvard Medical School, Cambridge, United States, Massachusetts General Hospital, Boston, United States, 3La Trobe University, Australian Research Centre in Sex, Health and Society (ARCSHS), Melbourne, Australia, 4University of South Carolina, Columbia, United States

Background: HIV-related stigma impedes access to the entire spectrum of HIV prevention/treatment services. Less is known about its effects on other indicators of well-being. We sought to determine whether HIV-related stigma is associated with food insecurity and whether the relationship is mediated by mental health-related quality of life (MHRQoL).

Methods: Men and women initiating ART in the Uganda AIDS Rural Treatment Outcomes (UARTO) cohort were followed quarterly. Primary outcome: food insecurity, measured with the validated Household Food Insecurity Access Scale. Key covariates of interest: internalized stigma (measured with the validated Internalized AIDS-Related Stigma Scale) and enacted stigma (measured as the sum total of the number of enacted stigma events over the past 3 months). Both stigma variables were standardized (mean 0, s.d. 1) to facilitate comparisons about their effects. Model parameters were estimated with least squares regression in a GEE framework to account for correlated observations over time. Regressions were adjusted for sociodemographics, the Social Support Scale, the association between sexual orientation, duration on ART, CD4 count, and alcohol & tobacco use. To determine whether the effects of stigma were mediated by MHRQoL, the Medical Outcome Study-HIV Mental Health Summary (MHS) was included in the regression model, and the change in the coefficient on stigma was re-assessed.

Results: Both internalized (β=0.62, P< 0.001) and enacted (β=0.45, P< 0.001) stigma were independently associated with increased food insecurity. When MHS was included in the regression model, it had an independent negative effect on food insecurity (β=-0.17, P< 0.001), and the coefficients for both internalized (β=0.31, P<0.009) and enacted stigma (β=0.30, P<0.005) stigma declined (but remained statistically significant).

Conclusions: Internalized and enacted HIV stigma were independently associated with food insecurity. These effects were largely mediated by worsened MHRQoL. Structural interventions to reduce HIV stigma, particularly internalized stigma, may improve food insecurity. Presenting author email: alexander.tsai@ucsf.edu
WEPE0670
Changing attitude towards people living with HIV/AIDS
K. Baraka
National Network of Tanzanian Women with HIV/AIDS (NETWOW), Program Design and Management, Dar es Salaam, Tanzania, United Republic of Tanzania

Issues: From 1983 when the first HIV case was reported in Tanzania, trends of stigma against persons living with HIV/AIDS (PLHAs) showed the increasing negativity in the growing society by PLHAs themselves.

Description: Having observed this situation, and taking part in advocacy against stigma, National Network of Tanzanian Women living with HIV/AIDS in her 2008/2009 Treatment Literacy Project in Mvomero district in Tanzania; techniques of combating HIV related stigma was an additional but emphasized topic. To test the importance and effectiveness of the outcome of this topic, trames who were all women living with HIV/AIDS were assigned to identify members with HIV/AIDS in their neighborhoods and visit their families to talk and educate them against HIV/AIDS related stigma and discrimination.

Lessons learned: Evaluation conducted shows that 25 women who were given the assignment reached 120 patients and their families and educated them on the pluses of stigma and discrimination to PLHAs and society at large. It further showed that 100% of the families visited showed a positive reaction after the lesson. However all patients showed some self stigma even after the lesson.

Next steps: This intervention shows that self stigma is something that should vigorously be addressed while challenging stigma and discrimination.

Women with HIV/AIDS have much influence in families in addressing stigma and discrimination. They need capacity building through continuous trainings.

Current stigma index projects will provide a good base for addressing stigma and discrimination. This is a tool that will measure and detect changing trends in relation to HIV/AIDS and explore these themes by people living with HIV/AIDS.

Presenting author email: barakamf2005@yahoo.com

WEPE0671
Celebrating those who care: a radio programme by positive journalists
S. Mirchandani
The Communication Hub, Mumbai, India

Issues: PLHIV were trained as radio journalists, and interviewed ‘people who care’. The objective was to ‘celebrate the good’ and to showcase that for every one who stigmatizes, there is someone who cares. A participatory project, it also impacted the PLHIV themselves.

Description: TCH partnered with NMP+ to train ten PLHIV in radio journalism. They were taught the use of recorders and how to upload interviews. They identified ‘heart-warning’ stories that showcased that it’s possible for someone who stigmatizes, there is someone who cares. A participatory project, it also impacted the PLHIV themselves.

Presenting author email: saminth@thecommunicationhub.com

WEPE0672
Experiencing internalized stigma among people with HIV/AIDS in Puerto Rico
R. Gonzalez-Arias, 1 Toro-Alfonso, N. Varas-Diaz
University of Puerto Rico, Department of Psychology, San Juan, Puerto Rico

Background: Many studies have indicated the dire consequences of stigma related to HIV / AIDS. However the majority of studies have focused on manifest stigma and few have focused on the internalized experience of stigma. Internalized stigma has very adverse effects on people with HIV/AIDS (PWHA) as well as their communities.

Methods: The project demonstrated that people respond well to stories that portray positive aspects of behaviour and attitude. Also, the fact that PLHIV created the programmes demonstrated that living productively with HIV was possible. The personal journey that PLHIV experienced while inter- view ing was something transformational. It often took a leap of faith to per- sist in dealing with these stories. A lesson learnt was that building capacity requires a sustained process. Another learning was that not everyone who stigmatizes, there is someone who cares. A participatory project, it also impacted the PLHIV themselves.

Results: They identified ‘heart-warning’ stories that showcased that it’s possible for someone who stigmatizes, there is someone who cares. A participatory project, it also impacted the PLHIV themselves.

Next steps: The programmes were pilot tested with encouraging results. They need to be aired for which necessary resources are being sought. The episodes lend themselves to multiple use, and can be used as stimulus to catalyze discussions in support groups. The stories can extend to a print campa- ign. The journalists who have evolved the necessary interest and aptitude can undergo further training to improve their skills.

Presenting author email: ronali@satellitecom.com

WEPE0673
Confronting stigma - HEROES Campaign
R. Lehnko
The AIDS Consortium, Media & Communication, Johannesburg, South Africa

Background: The HEROES Campaign is an AIDS Consortium (AC) led stigma reduction campaign aimed at challenging stigma and discrimination on the basis of one’s HIV status. The campaign’s phases aimed to enhance belief, perceptions and misconceptions about HIV which may lead to stigmatization and discrimination.

Methods: Selected prominent figures openly living with HIV were chosen for the campaign. These individuals were known people who had a high profile either in society or their workplace. Through the use of different media such as posters, audiovisuals, website and face-to-face interactions, each participant was profiled and ‘shared their journey’ with the audiences.

Results: As a result of this campaign, a second phase taking this concept to communities has been launched. Community champions are activists openly living with HIV, engaging and responding to HIV on a daily basis. These “Community Champions” are trained in human rights and advocacy, equipping them to disseminate information on human rights and to act as support struc- tures for communities where human rights violations on the basis of one’s HIV status are experienced. The AC will provide legal support and highlight these to the National AIDS Council. The champions will also get an opportunity to “share their journey” with HIV; demonstrating the efficacy of HIV treatment and addressing issues of both external and internal stigma as highlighted by the Heroes Campaign.

Conclusions: This campaign has demonstrated how stigma and discrimination hamper our progress in responding to HIV, but also demonstrated how powerful taking ownership of one’s HIV status can be. Stigma continues to be a barrier in accessing life saving services and interventions. Continuous intervention is therefore of utmost importance.

Presenting author email: rlulane@aidsconsortium.org.za

WEPE0674
HIV/AIDS and the workplace, unemployment, return to work and rehabilitation
WEPE0675
WEPE0676
WEPE0677
A conceptual framework of labour force participation for people living with HIV in Canada: translating knowledge for community results
1University of Calgary, Faculty of Social Work, Calgary, Canada, 2McMaster University, School of Rehabilitation Science, Hamilton, Canada, 3Canadian Working Group on HIV and Rehabilitation, Toronto, Canada

Background: Employment is a critical issue facing people living with HIV (PHAs). We developed a conceptual framework of labour force participation in order to inform the development of labour force initiatives aimed to enhance social participation for PHAs in Canada.

Methods: A preliminary framework was constructed based on a scoping re- view of 243 articles and 42 reports on HIV and labour force participation. We then conducted 18 interviews and 3 focus groups with a total of 34 partici- pants (PHAs, employers, insurers and policy makers) to augment the frame- work. Thematic analysis was conducted to identify facilitators and barriers of labour force participation and key components to enhance the framework. Knowledge translation was an important phase of this research. We piloted fact sheets, brochures, and workshop presentations based on the framework and conducted an evaluation of usefulness and relevance of the materials with community stakeholders.

Results: The conceptual framework incorporates six key components related to labour force participation for PHAs in Canada: the meaning of work; char- acteristics of work; contextual factors; factors that influence employment; barriers and facilitators to employment; and strategies and supports for entering/return- ing to sustaining employment; and potential barriers to return to work and re- habilitation. The framework has significance for PHAs, employers, insurers and policy makers in Canada. Hence, knowledge translation activities to support program planning and policy development are critical. Fact sheets, brochures, and workshop presentations based on the framework were targeted towards
WEPE0675
The impact of the economic crisis on HIV/AIDS workplace programmes
S. Kisting, K. Dhanapala, M. Sundell, L.-N. Hsu
International Labour Organization, ILO/AIDS, Geneva, Switzerland

Background: In view of the 2010 goal for achieving universal access, a global survey was conducted by the International Labour Organization in 2009 focusing on the workplace, proven to be an effective entry point for HIV responses. This revealed that the economic crisis is undermining the capacity of workers’ and employers’ organizations to implement HIV programmes as a result of job losses, job insecurity, increased stigma and constrained resources. This has compromised gains in HIV prevention, diminished institutional capacity to mitigate the impact of HIV, and jeopardised the rights of workers and their families to access essential services.

Methods: The survey was a first attempt to assess the impact of the crisis on HIV responses in the workplace. A purposive survey of HIV and workplace programme specialists from 21 countries (12 in Africa, three in Europe, five in Latin America and the Caribbean and three in Asia) was conducted in 2009 during the peak of the economic crisis based on a standardized questionnaire.

Results: The survey identified differential impacts of the crisis on economic sectors in terms of HIV vulnerabilities, demonstrating a need for timely information on employment patterns and HIV services. Such information should be built into national support systems to enable improved targeting in order to reach the most vulnerable groups and sectors in terms of HIV vulnerabilities, demonstrating a need for timely information on employment patterns and HIV services. Such information should be built into national support systems to enable improved targeting in order to reach the most vulnerable.

Conclusions: Periodic surveys with government, employers and labour unions are necessary to monitor employment trends (including informalization, unsafe work, job downgrades) and assess their impact on workplace HIV programmes and the rights of workers. Social protection needs should also be monitored. Coordinated technical assistance for livelihood support and social safety nets to mitigate the negative impacts of the economic crisis on people affected by HIV.

Presenting author email: kisting@ilo.org

WEPE0676
Organizations working for HIV need to be more expressive for PLHIV employment
D. Sahni, J. Jarsh
1HIV ATLAS.org, Media Relations, New Delhi, India, 2HIV ATLAS.org, Administration, New Delhi, India

Background: Majority of job postings by organizations working for HIV do not express openly that people living with HIV are preferred or encouraged to apply.

Methods: HIV ATLAS monitors more than 600 yahoos, Google groups, websites of major organizations working for HIV, job postings from pharmaceutical companies, job portals across like Dice, Monster. Indeed etc and so far have cross posted 2300 unique jobs in one and half years.

Results: A sad picture comes out as only 28% job postings are expressing their openness to encourage PLHIV. Another 30 % write that they are equal opportunity employers, 14% expressed that they prefer women candidates while the rest does not mention anything.

Conclusions: Unless organizations working in the field of HIV will not take lead in expressing openly about PLHIV, it is going to be very difficult to convince other sectors for the same to fight the stigma associated with HIV.

Presenting author email: jarsh@hivatlas.org

WEPE0677
www.workpositive.ch - an information portal on HIV and employment
R. Briggs
Swiss Aids Federation, Advocacy, Zürich, Switzerland

Issues: In Switzerland around 15000 out of about 25000 people living with HIV/AIDS are employed, and again 70% out of them have a full time employment. Many employees living with HIV/AIDS face violations of their fundamental rights at work (e.g. disrespect of confidentiality and discrimination). In order to help to change this situation, the Swiss AIDS Federation has adapted its own workplace information platform - www.workpositive.ch. From a simple job search engine, it developed into a full blown information portal on HIV and employment.

Description: www.workpositive.ch is easy accessible for everybody. The primary target group covers employers and HR managers. www.workpositive.ch gives them access to a) instruments which allow them to discover knowledge gaps and to improve their situation in their company and b) documents which can be used in the fight against discrimination. For the secondary target group - working people with HIV/AIDS - www.workpositive.ch offers a) information about their rights, b) addresses of counseling centers and c) tips for the application process. Examples of best practice companies demonstrate how the integration of people living with HIV/AIDS can be promoted at the workplace.

Lessons learned: Since we launched our information portal in July 2009, www.workpositive.ch had a daily average of 62 (in July) to 282 (in October) visitors. The greatest challenge was recruiting ones knowledge on HIV/Aids in general, 2) the real worklife scenarios which give management leaders the opportunity to check whether their handling of HIV/AIDS in the workplace fits with Swiss law, and 3) the chapter for employees. Statistics show that most visits occur during working hours. Those indicators show that projects such as this are able to reach its primary target groups and make a difference.

Next steps: Actually, www.workpositive.ch is only available in German and French. An English version will be realized soon.

Presenting author email: rita.bossart@aids.ch

WEPE0678
The workplace experience of people living with HIV in the UK: a qualitative study
1NAT - the National AIDS Trust, London, United Kingdom, 2City University, London, United Kingdom

Background: While a number of studies have highlighted barriers to employ- ment for people living with HIV, the experiences of people with HIV who are actually working remains an under-researched area.

Methods: The two groups most affected by HIV in the UK are: (i) gay and bisexual men and (ii) black African heterosexual men and women. Five focus groups were run between August and October 2008, two with gay and bisexual men (19 participants) and three with HIV-positive hetero- sexual black Africans (13 women and 6 men). Focus groups were held in Lon- don, Manchester, Luton and Glasgow. All participants were employed.

Results: Participants noted two ‘flashpoints’ when HIV most impacted upon their work: at initial diagnosis and when starting or changing medication. This was the case for both gay/bisexual men and black African heterosexual men and women. The most commonly reported experiences were: anxiety, stress and tiredness. Disclosure was a key concern. Focus group par- ticipants said that the decision to disclose at work was a difficult one. Those who had disclosed their status said that it gave them an advantage when they needed flexibility at work. Non disclosure caused problems around taking time off to attend clinics, managing medication and side effects at work. Some par- ticipants who had disclosed their HIV status had experienced discrimination, although it was sometimes difficult to disentangle this from discrimination related to race or sexual orientation. Knowledge of legal protections under the Disability Discrimination Act 2005 and access to “reasonable adjustments” varied.

Conclusion: Most focus group participants adjusted to their HIV diagnosis with little long term impact on their working life. However, there are oppor- tunities to improve people’s knowledge of their rights at work and access to these rights. These findings informed NAT’s policy recommendations for government, employers and trade unions.

Presenting author email: yusef.azad@nat.org.uk

WEPE0679
Gay men, HIV and employment in the UK: a national study
1NAT - the National AIDS Trust, London, United Kingdom, 2City University, London, United Kingdom

Background: Improved medical treatment means that people living with HIV in the UK are able to remain in the workforce for many more years. However, there has been little research into the employment experiences of HIV-positive people who are in paid work.

Methods: An anonymous online survey was conducted on the gay social networking website Gaydar with 15,861 respondents. The eligible sample for analysis included men who were: gay or bisexual, over 18 years old, in work, living in the UK and who had had an HIV test (n=8,369). 1,830 were HIV- positive (mean age 39 years) and 6,539 were HIV negative (mean age 37 years).

Results: Over half the HIV-positive men (58%) said that HIV had no impact on their working lives and 70% had taken no HIV-related sickness days in the last year. There was no significant difference between HIV-positive and HIV-negative men in the number of days sick leave they had taken in the last year for non-HIV related illness (mean 8.3 v 7.3 days, p=0.1). However, important areas of concern remain. 40% of HIV-positive men had not disclosed their HIV status to someone at work, of whom more than half feared poor treatment if they did disclose. Two thirds of HIV-positive respondents were aware of their rights under the Disability Discrimination Act 2005; of these, almost a third (30%) were unaware of their right to “reasonable adjustments.” A fifth of men who had disclosed their HIV-positive status at work had experienced discrimination in their current or previous job.

Conclusion: Many gay men living with HIV can work without difficulty. None- theless, there are real opportunities to improve the employment experience of people living with HIV. NAT has used these findings to develop policy recom- mendations for employers, trade unions and support organisations.

Presenting author email: steff.mccarthy@nat.org.uk
WEPE0680
Addressing HIV and AIDS related stigma and discrimination in the workplace: an intervention for public and private sectors - practically speaking

J. Wessene1y, C. Morris
1Johns Hopkins University, Pretoria, South Africa

Issues: HIV related stigma remains a significant challenge in the in the workplace in sub-Saharan Africa and elsewhere. The existing literature shows a wide variation of policies and programs around HIV and specific stigma reduction interventions are scarcely documented and implemented in the workplace. The Sibaya project, in South Africa has developed HIV interventions for the workplace including one for HIV related stigma and discrimination targeted towards government, parastatals and corporate sector managers as well as general employees.

Description: The project developed HIV stigma training for managers at all levels in the corporate sector and public sector that address HIV related stigma and discrimination towards people living with HIV. The training in the public sector included Magistrates and Prosecutors and this training also included human and legal rights issues of people living with HIV. The training take one of two forms: one that is two days long for the judiciary and includes topics such as basics of HIV, stages of HIV infection, STIs, TB, HIV related stigma and discrimination as well as HIV and AIDS and the law or a second that includes an extensive legal discussion for other sectors.

Lessons learned: We followed up with group discussions after 12 months to determine the impact of the intervention. Overall participants felt like the training improved their understanding of HIV and increased their ability to deal with stigma and discrimination issues in the workplace. Based on responses received during the assessment, the impact is evident in four specific areas: the participants’ personal knowledge and understanding of HIV basic facts, the participants’ personal views on people living with HIV, and the participants’ relationships with family and friends.

Next steps: The intervention is going to be more practically measured using a stigma tool being developed.

Presenting author email: jwessene@johns-hopkins.edu

WEPE0681
Impact of HIV disease severity on the risk of work cessation in France in 2004-2008: results from the ANRS-COPANA cohort

B. Dry-spira1, M. Le Den1, C. Legaye1, J. Goujard5, L. Meyer2,5, ANRS-COPANA Cohort Study Group
1INSERM, U1018/CESP - Equipe Determinants Professionels et Sociaux de la Sante, Villejuif, France, 2INSERM, U1018/CESP - Equipe Epidemiologie du VIH et des IST, Le Kremlin Bicetre, France, 3Hopital Avicenne, Bobigny, France, 4Hopital Bicetre, Le Kremlin Bicetre, France, 5Hopital Hotel-Dieu, Paris, France, 6Hopital de Bicetre, Le Kremlin Bicetre, France

Background: Employment is a major factor in maintaining income and living conditions among persons with chronic diseases. Severity of HIV infection has been shown to be a predictor of work cessation earlier in the HAART era. Our objective was to measure the impact of HIV disease severity on the risk of work cessation in the most recent years, as the context of HIV management has changed.

Methods: We used data from the French multicenter ANRS-COPANA cohort of 800 subjects (≤ 4 years) with advanced HIV infection (CD4 < 100 or antiretroviral treatment at baseline in 2004-2008. Detailed information on employment, living conditions and clinical/biological data were collected prospectively. Work cessation was defined as moving from employment to unemployment/inactivity before legal age for retirement (60 years). The impact of indicators of HIV disease severity (clinical stage and CD4 cell count) on the risk of work cessation was estimated using Cox models accounting for socio-demographic and occupational characteristics, living conditions, health behaviours, comorbidities and hospitalizations.

Results: A total of 321 participants were of working age and employed at baseline (median age at enrolment 36.6years; 20.2% women; 28.6% migrants). Of them, 34 (10.6%) stopped working before 60years: 29 became unemployed and 5 inactive. In multivariate analysis the risk of work cessation was higher among participants aged≥50years, those self-employed or with a disability and those who had experienced ≥1 hospitalization or ≥1 hospitalization with AIDS care facilities all over Japan in 2009. 1203 responses (66.4%) were returned via mail.

Results: 5.6% were women of responses. Average age was 42.2±11.0. 78.8% had received a sexual transmission, while 13.6% were unknown their route. Employment rate was 77.6 % in women showing significantly higher rate than men (56.9%). 43.5 % of employed women were at part-time position being put under the unstable employment system. In workplace, 52.0 % of employed women felt prejudice against HIV and 66.7 % were anxious wondering if their HIV status was revealed without their consent. Those who had disclosed their HIV status were 14.0 % in women and significantly lower level than in men (P<0.01). 76.2 % of women felt the restriction because of HIV for their career choice in the future and 73.8 % wanted to quit their job after knowing their HIV status. These figures were significantly higher than those of men (P<0.001).

Conclusions: In Japan condition for employment of female PLWH is worse than that of men and the rate they disclosed their HIV status in the workplace was also lower. The ratio that female PLWH felt restriction in their workplace due to HIV was higher than that of men. In particular, as they’re facing various difficulties in relation to privacy management in workplace, aggressive measures against HIV/AIDS by government and firms. Presenting author email: ohtsuki@ptokyo.com

WEPE0683
Working environment for female PLWH/A in Japan

C. Wakabayashi1, Y. Ikishima2, A. Mochizuki3, T. Ohtsuki1
1Saitama Prefectural University, Health Science Faculty, Saitama, Japan, 2Place Tokyo, Tokyo, Japan, 3Japanese Foundation for AIDS Prevention, Tokyo, Japan

Background: In Japan, since the number of female PLWH is small, social environment for them is vulnerable. We decided to examine current issues regarding the quality of working for female PLWH in Japan.

Methods: Anonymously survey forms for 1813 PLWH were distributed to 33 hospitals with AIDS care facilities all over Japan in 2009. 1203 responses (66.4%) were returned via mail.

Results: 5.6% were women of responses. Average age was 42.2±11.0. 78.8% had received a sexual transmission, while 13.6% were unknown their route. Employment rate was 77.6 % in women showing significantly higher rate than men (56.9%). 43.5 % of employed women were at part-time position being put under the unstable employment system. In workplace, 52.0 % of employed women felt prejudice against HIV and 66.7 % were anxious wondering if their HIV status was revealed without their consent. Those who had disclosed their HIV status were 14.0 % in women and significantly lower level than in men (P<0.01). 76.2 % of women felt the restriction because of HIV for their career choice in the future and 73.8 % wanted to quit their job after knowing their HIV status. These figures were significantly higher than those of men (P<0.001).

Conclusions: In Japan condition for employment of female PLWH is worse than that of men and the rate they disclosed their HIV status in the workplace was also lower. The ratio that female PLWH felt restriction in their workplace due to HIV was higher than that of men. In particular, as they’re facing various difficulties in relation to privacy management in workplace, aggressive measures against HIV/AIDS by government and firms. Presenting author email: ohtsuki@ptokyo.com

WEPE0684
Employment creation for people living with HIV and AIDS: lessons learned from Nepal

L.-N. Hsu1, A. Singh2, S. Li2, S. Kisting1
1International Labour Organization, Kathmandu, Nepal, 2International Labour Organization, ILO/AIDS, Geneva, Switzerland, 3International Labour Organization, Kathmandu, Nepal

Issues: Poverty and access to health care are two key challenges facing PLHIV. Their efforts to improve their situation are blocked by the lack of employment opportunities and widespread stigma and discrimination, on the basis of gender as well as HIV status.

Description: A training centre in Kailali province and the Nepal National Social Welfare Association (NNSWA) in Kanchanpur initiated a one-year pilot project in 2008-2009 with support from the ILO. Four local enterprises as well as business development service providers collaborated in this initiative to hire PLHIV or assist them to establish their own small businesses. Out of 80 PLHIV enrolled for training (61% women), 70 have since been employed or set up their own business (62% women). A Resource Centre for Employment and Entrepreneurship has been established and a Vocational Training Centre (VTC) has been developed in collaboration with local banks, the Kailali Chamber of Commerce.
LIVING WITH ART: IMPACT, QUALITY OF LIFE, BODY CHANGE AND SEXUAL BEHAVIOR
WEPE0686-WEPE0703

Women living with HIV/AIDS and the transformation process known as lipodystrophy: a qualitative study based in Montreal, Canada

M. Gagnon, D. Holmes
University of Ottawa, Faculty of Health Sciences, Ottawa, Canada

Background: Over the past decade, the lipodystrophy syndrome has become one of the biggest challenges in the field of HIV/AIDS. Yet, health care professionals and researchers have a very limited understanding of the experience of lipodystrophy since current knowledge is centered on the biological dimension of this syndrome. In fact, few qualitative studies have examined how lipodystrophy transforms the lives of people living with HIV/AIDS by reconﬁguring their bodies in unexpected ways. The main objective of this qualitative study was to explore and describe the transformation process that women living with HIV/AIDS experience following the onset of lipodystrophy.

Methods: From May to August 2008, 19 women living in Montreal (Canada) were interviewed using semi-structured interviews. The data was then analyzed following the principles of grounded theory and further conceptualized using complementary theoretical perspectives from the ﬁeld of critical theory.

Results: During the analysis, four categories emerged from the data and were further developed into a number of sub-categories. Overall, the participants explained how lipodystrophy had transformed their bodies, disrupted their identities and conﬁned them to a fragile social trajectory. In this sense, the experience of lipodystrophy was described as a profoundly disruptive transformation that includes three distinct stages: normalization, problematization, and transformation. This process was characterized by a progression of lipodystrophy as well as an intensiﬁcation of the efforts to regain control over the body. Participants also described how they became increasingly distressed by their new physicality and their troublesome visibility.

Conclusions: This study has important implications for clinical practice by providing a more in-depth understanding of the psychological and social challenges of lipodystrophy and the needs of women who suffer from this condition. The research is signiﬁcant since it provides an in-depth description of a phenomenon that is not yet fully understood by the scientiﬁc community.

Presenting author email: marilou.gagnon@uottawa.ca

WEPE0687
Quality of life in HIV+ women: self-esteem, body image and social relations

M. I. de Costa Nunes
Universidade de Coimbra, Faculdade de Psicologia e Ciências da Educação, Coimbra, Portugal

Background: This paper describes the impact of HIV in the Quality of Life (QoL) of women living with HIV/AIDS (WLHA) in a gender comparative study. The main objective is to evaluate the QoL of WLHA regarding the social relation domain and self-esteem and body image facets (psychological domain) and their relations to sociodemographic and clinical factors.

Methods: The study implemented at national level involved the participation of the major national hospitals and their HIV patients in the evaluation protocol based on the locally validated version of the WHO Quality of Life Instrument for HIV (WHOQOL-HIV-120) and a summary of socio demographic and clinical data. For statistical and data analysis the 14.0 version of SPSS was used including descriptive statistics and inferential statistics considering a signiﬁcance level of less than 0.05.

Results: Considering a sample of 158 people living with HIV (79 women and 79 men), the results showed a strong relationship between QoL and the facets/domains of WHOQOL-HIV-120 (physical, psychological, independence level, social relationships, environment, spirituality and personal beliefs), demonstrating the strong negative effect of HIV on QoL of all PWHA. Compared to the group of men, women showed a lower QoL in terms of social well-being, reporting less social support.

Conclusions: The frugal existence of studies that approach WLHA and fundamentally their QoL substantiates the pertinence of this study. The results showed the negative effect of HIV in QoL of WLHA and mostly in terms of social relationships. These data is pertinent to reinforce the necessity of improvement of QoL of WLH, and demonstrates the lack of social support given to women. Understanding the sociodemographic, clinical, relational and psychological characteristics of the WLHA, as well as their evaluation of QoL may provide potentially useful information for tailoring interventions for prevention, care and to enhance QoL among WLH.

Presenting author email: isabelcn@gmail.com
WEPE0689
A participatory approach to assessing the quality of life by people affected by HIV

A. Smith1, C. Byrne1, C. Ogola1, Y. Degefu3, F. Ibramyogy4, N.P. Walman1, A. Dibdo4, H. Jones1, I. Kent2
1CAFOD, London, United Kingdom, 2CAFOD, Nairobi, Kenya, 3CAFOD, Addis Ababa, Ethiopia, 4CAFOD, Maputo, Mozambique, 1CAFOD, Jos, Nigeria, 2CAFOD, Harare, Zimbabwe

Lessons learned:
• ART/healthcare are the FIRST but NOT SOLE steps to improved QoL
• Staff welcomed affirmation gleaned from the tool
• The batteries tool is easily understood, simple to use, can be self-administered
• The tool strengthens clients’ sense of empowerment, vision for future.

Health:
• ART adherence.

Four domains were identified as essential to quality of life.

Issues:
• Associated factors (adjusted prevalence ratios - PR) were estimated by Poisson regression.

Methods:
• Compared to other study on HIV-positive women (Bova and Durante, 2003), the interruption of sexual life after diagnosis among women is similar. However, here women indicate a higher proportion of sexual life worsening after diagnosis (40% vs 11%). The associations found in the present study indicate that improving the bonding with health care services may affect HIV-positive women perception of their sexual life. Having an income on the extremes (too low or too high) seems to favour sexual life worsening. These associations demonstrate sexual life goes through multifaceted influences. These factors should be observed if we aim at guaranteeing the right to a healthy, satisfactory, pleasurable and free of coercion sex life; with or without presenting.

Results:
• Negative changes in sexual life after diagnosis were associated with some variables: not using condoms, not using ART를 했거나, not being attended by a gynecologist in the health care center (PR: 1.20), not being attended by a nurse in the health care center (PR: 2.37).

Conclusions:
• Negative changes in sexual life after diagnosis were associated with some variables: not using condoms, not using ART를 했거나, not being attended by a gynecologist in the health care center (PR: 1.20), not being attended by a nurse in the health care center (PR: 2.37).

WEPE0691
Negative changes in sexual life of HIV-positive women and its associations, Brazil

L. Polishchuck1, J. Franco-Junior2, V. Paiva3, J.R. Ayres1
1School of Public Health - USP, São Paulo, Brazil, 2School of Public Health - USP, School of Maternal and Child Health - UNICAMP, São Paulo, Brazil, 3Brazilian Institute of Sexual and Reproductive Health Psychology - USP, São Paulo, Brazil, 4School of Medicine/University of São Paulo, Sao Paulo, Brazil

Background:
• After 30 years of epidemic, sexuality of HIV-positive women remains taboo. In Brazil, where we have the right of HAART treatment, few studies analyzed those women sexual life.

Methods:
• In a consecutive sample, 729 HIV-positive women of two specialized AIDS care centers in Sao Paulo were interviewed amid 1999 and 2000. The inclusion criteria was having at least 18 years old. Four out of ten women reported negative changes and one in ten interrupted their sexual life after HIV diagnosis. Associated factors (adjusted prevalence ratios - PR) were estimated by Poisson regression.

Results:
• Negative changes in sexual life after diagnosis were associated with some variables: not using condoms, not using ART를 했거나, not being attended by a gynecologist in the health care center (PR: 1.20), not being attended by a nurse in the health care center (PR: 2.37).

Conclusions:
• Negative changes in sexual life after diagnosis were associated with some variables: not using condoms, not using ART를 했거나, not being attended by a gynecologist in the health care center (PR: 1.20), not being attended by a nurse in the health care center (PR: 2.37).

WEPE0692
Gaps in perceptions and experiences of treatment-related issues between Korean HIV-positive patients and physicians: results of a structured questionnaire

M.W. Kang, Y.J. Kim, H.H. Song, K.W. Hong, S.H. Wie, S.I. Kim
The Catholic University of Korea, Seoul, Korea, Republic of Korea

Background:
• International Association of Physicians in AIDS Care (IAPAC) did a comprehensive survey of both HIV-positive patients and HIV-healthy people about how physicians understand their mindsets. The objective of this survey was to identify gaps in perceptions of treatment-related issues between physicians and patients.

Methods:
• A 20-items structured questionnaire was developed, utilizing Likert scale and open-ended questions. Patients were recruited and surveyed via third-party outside of hospital to exclude any biases.

Results:
• Forty-seven physicians and 100 patients completed the questionnaire. Regarding treatment goal of HIV, efficacy-related attributes, such as ‘continuous HIV viral suppression’ and ‘CD4+ cell level recovery’, are considered as the most important outcomes of treatment by both physicians (mean 9.8 and 9.4 on 10-point importance scale) and patients (9.6 and 9.3). However, patients rated ‘maintenance of healthy appearance’ higher (8.7) than physicians (8.0) (P=0.033). Views on treatment decision-making process differed between physicians and patients. Physicians (8.0) (P=0.033). Views on treatment decision-making process differed between physicians and patients in that 83% of physicians answered they decide together with patients whereas only 49% of patients answered so. The experience rate of adverse events varied between patients and physicians. The gap existed in reporting of ‘appearance change’ (physicians 12% vs. patients 50%), ‘CNS adverse events’ (19% vs. 43%), and ‘fatigue’ (27% vs. 50%). In rating the order of concerns of adverse events, physicians chose ‘lipid level increase’ (61%), ‘GI trouble’ (60%), and ‘depression or anxiety’ (40%) as the most concerning, whereas patients chose ‘body shape change’ (45%), ‘skin color change’ (38%), and ‘depression or anxiety’ (36%).

Conclusions:
• Survey results show that there is room to improve doctor-patient communication in HIV care to ensure successful treatment.

Presenting author email: jfjunior@usp.br

WEPE0693
Predictors of physical health domain of quality of life (QOL) in people living with HIV and AIDS (PLWHA) in Ibadan

O. Folagoro1, A. Ibraboi1, A. Adetunji1, O. Akinremi2, M. Ladipo3, J. Adebowale1
1University College Hospital, Ibadan, General Outpatients/Family Medicine, University College Hospital, Ibadan, Ibadan, Nigeria, 2University of Ibadan Nigeria, EMIHSEH Department, College of Medicine, Ibadan, Nigeria, 3University College Hospital, Ibadan, Obstetrics Gynaecology Department, Ibadan, Nigeria

Background:
• Background of quality of life (QOL) is an important component in the evaluation of the well-being of PLWHA. The physical health domain of QOL measures the impact of disease on activities of daily living, dependence on medication, lack of energy and initiative, restricted movement, and other activities. The study compared QOL in HIV-positive patients attending the ARV clinic with stable HIV-negative patients that may have other chronic diseases like hypertension.

Results:
• The physical health domain of QOL measures the impact of disease on activities of daily living, dependence on medication, lack of energy and initiative, restricted movement, and other activities.

Conclusions:
• The physical health domain of QOL measures the impact of disease on activities of daily living, dependence on medication, lack of energy and initiative, restricted movement, and other activities.

Presenting author email: infect@catholic.ac.kr

209
WEPE0694
Knowledge of anti retroviral therapy and sexual behavior among people with HIV/AIDS in Eastern Uganda
T. Wakabi, B. Kironde, J. Ouma, C. Niko, E.Were, E. Sempiira, S.K. Lwanja
Management Sciences for Health, STAR-E LQAS, Kampala, Uganda

Background: The scale up of access to Anti Retroviral Therapy (ART) in Uganda, has resulted in increased numbers of Persons with HIV/AIDS (PHA) accessing ART 006,000 in 2002 to over 180,000 in 2009 to reduce the population-based survey of PHAs to assess their knowledge of ARVs and their self-reported behaviors that might prevent adherence ART-based interventions.

Methods: Data were collected in November and December 2009 from 4 districts in eastern Uganda, using Lot Quality Assurance Sampling (LQAS) metho-dology. Each district served as a supervision area. The sampling frame consisted of AIDS service organizations' updated PHA registers in each district. Nineteen PHAs 15-54 years old were randomly selected from each district. Data were collected by members of the PHA service organizations after 5 days' training. Data were hand tabulated and summaries obtained for selected indicators.

Results: Out of the 76 PHAs interviewed, 62% were on ARVs. Nearly all respondents (96%) knew that non-adherence to ARV treatment could lead to resistant virus, with 88% agreeing that non-adherence on ARVs should continue taking the drugs for life. However, only 55% know that ARVs are not a cure for AIDS, while 45% believed that patients on ART must continue taking ART even after 5 years' treatment. Data were hand tabulated and summaries obtained for selected indicators.

Conclusions: Although knowledge on adherence to treatment is high, misconceptions about ARTs still exist. The belief that ARTs are a cure for AIDS and that one cannot transmit HIV while on ARTs, and low consistent condom use, could lead to continued transmission. Counseling and sensitization on ARTs are required to pay special attention to misconceptions about ARTs and sexual behavior among PHA.

Presenting author email: twakabi@msh.org

WEPE0695
To what extent does antiretroviral therapy aid livelihood recovery? An assessment of household vulnerability in Uganda
N. Kyomugene1, A. Grant1, K. Kiimmel1
1London School of Hygiene & Tropical Medicine, Public Health and Policy, London, United Kingdom, 2London School of Hygiene & Tropical Medicine, Infectious and Tropical Diseases, London, United Kingdom

Background: More is being learnt about the effect of Antiretroviral Therapy (ART) on individuals and households. People's experience of adjusting to and living with ART, including the role of social, economic and livelihood activities of individuals and their households, is however still poorly understood.

Methods: Using a semi-structured instrument, a cohort of 10 women and 2 men who were clients of The Aids Support Organisation (TASO), Uganda, were interviewed within two weeks of their initiation on Antiretroviral Therapy (ART), and again after 6 and 12 months of continued use. Individuals were purposively sampled to include a mixture of urban and rural household and households with differing household structures. The instrument allowed the interviewers to examine how changes in individuals' health and physical capacity affected their ability to carry out their normal activities, diet, social interaction and household responsibilities. Interviews were conducted in Uganda.

Results: Though some clients still experienced residual morbidity, all participants reported a significant improvement in their health, physical strength and consequently ability to carry out their self-defined normal activities. This translated into them becoming less reliant on support and assistance from other household members who in turn were able to spend more time on their own activities. Without exception however, individuals reported that they had been unable to translate these improvements into increased income or resources for their household. The costs associated with clinic visits and pharmaceuticals were therefore a major constraint to them initiating ART.

Conclusions: The findings suggest that, through sustained use of ART, individuals can expect a significant improvement in their health and levels of strength, this does not immediately translate into improved ability to earn or re-establish a livelihood or reduce vulnerability to future shocks.

Presenting author email: namusi.kyegonbe@tshm.ac.uk

WEPE0696
Factors influencing treatment adherence of young people
F. Lazar1, A.E. Luca1, C. Constant1, A.G. Blagloso1, A.J. Buluþ2, S. Suciu1
1University of Bucharest, Faculty of Sociology and Social Work, Bucharest, Romania, 2Romanian Children's Appeal Foundation, Bucharest, Romania

Background: Between 1986 and 1992 in Romania have been infected with HIV over 10,000 children. They represented more than half of the total HIV pediatric cases of Europe. Many of these children survived and have now between 18 and 24 years old. The mean of them are sexually active. The main objective of this study is to assess the factors that influence the adherence to antiretroviral (ART) treatment of the youth between 18 and 24 years old.

Methods: It has been used a questionnaire applied by an interview operator. It comprises 10 sections with 60 items: profile of the person who responds at the questionnaire, knowledge about HIV/AIDS and sexual transmitted diseases, the couple relationship, the use of the condom, diagnosis disclosure, risk behaviors on HIV transmission, ART treatment, access to services, the perception of the interview operator over the person who respond.

The study included 96 HIV+ patients of “Dr. Victor Babes” Hospital from Bucharest.

Results: In the last 3 months before the study, 48.4% from the interviewed patients declared that they never interrupted treatment. The patients’ adherence to ARV was excellent for the first 30 days; 70.0% interrupted treatment for more than 1 month. Most of the patients interrupted treatment because they believed they were cured (53.2%), lack of money (14.3%), the wish that others don’t know that he/she is ill (10.2%), lack of medication (10.2%).

Conclusions: A higher level of knowledge on HIV issue is related with a better adherence to the treatment. Also, if the level of education is higher, the adherence to the treatment tends to grow up. The girls tend to have a better adherence to treatment than boys. The young nearly diagnosed are more adherent to the treatment than the others diagnosed after 18 years.

Presenting author email: catapsicyo@yahoo.com

WEPE0697
Quality of life of people living with HIV/AIDS
U. UdormSubgap1, P. Subhalkusaksorn1
1Clinical Epidemiology Unit, Research Center, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand, 2Institute of Community Medicine Center, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

Background: The availability of antiretroviral therapy (ART) has delayed disease progression, prolonged survival and impact on quality of life. Since the National Access to Antiretroviral Program for People with HIV/AIDS of Thailand was launched in 2003, more HIV/AIDS persons gained access to ART. This study examined overall quality of life of HIV/AIDS persons after two year of program implementation.

Methods: Hospital-based survey was conducted among HIV/AIDS persons. Thirty-six public hospitals were randomly sampled as study sites comprising 12 regional or general hospitals and 24 community hospitals. Self-adminis-trated questionnaires were distributed to HIV/AIDS patients (> 18 years old) attending these hospital between March and May, 2008. The patients were asked to self-report their quality of life using five-point rating scale. Multivariate analysis was used to analyze variables associated with quality of life.

Results: Of 2,629 HIV/AIDS persons (mean age of 35.9 years old with 46.0% male, 92.0% reported high quality of life. Subgroup analysis found that those who never receiving ART reflected better quality of life (93.9%) than those who did not receive ART (85.0%) and those who ever receive ART and discontinued (70.0%). Multivariate analysis demonstrated that factors significantly associated with low quality of life included male gender (adjusted OR = 1.56, 95%CI = 1.02-2.32, p-value=0.041) and non-ART compared with ART (adjusted OR = 2.66, 95%CI = 1.71-4.13, p-value < 0.001).

Conclusions: The study suggested that ART is associated with improved quality of life. However, a limitation of this study was lack of information on stage of disease which independently can affect quality of life.

Presenting author email: tephy@mahidol.ac.th

WEPE0698
Improving the quality of life among PLWHA based on their medication status in rural China: outcomes from a combined individual- and community-level intervention
A. Liu1, J. Wu1, E. Liu2, S. Sullivan2, K. Rou1, E. Detels3, Z. Wu4, CEPHfold5, 1Chinese Center For Disease Control and Prevention, Beijing, China, 2San Francisco General Hospital, School of Public Health, San Francisco, CA, 3School of Public Health, University of California Los Angeles, School of Public Health, Los Angeles, United States, 4University of California Los Angeles, School of Medicine, Center for Community Health, Los Angeles, United States

Background: Given the long history achievable with current therapeutic strategies for people living with HIV (PLWHA), quality of life (QOL) has emerged as a significant outcome measure and an important goal of treatment. The objective of this study was to evaluate the efficacy of a combined...
individual- and community-level intervention aimed at improving the QOL among former plasma donors living with HIV.

Methods: A randomized trial was conducted in 14 villages in rural China. In the intervention villages, PLWHA (n=156) received an intensive Health Education intervention consisting of skills building and didactic training to improve HIV/AIDS knowledge, and maintain physical and mental health, followed by booster sessions for the rest of the year; PLWHA in the control arm (n=127) received standard health care. Concurrently, in the intervention villages, 742 popular opinion leaders were selected and trained to challenge their peers’ stigma towards PLWHA.

Results: To control for potential effects of antiretroviral therapy (ART), the sample was stratified by CD4 count for those without ART and by those who did not. Physical health QOL measures indicate that there were no significant improvements at 6- and 12-month follow-ups for the intervention group. Mean scores for those with ART was 45.8 at baseline, 46.3 at 6-month follow-up and 46.4 at 12-month follow-up (p > .05); for those without ART was 45.6, 46.9, and 47.2 respectively (p > .05). Similarly, mental health scores did not significantly improve at 6-month and 12-month follow-ups for the intervention group. Mean scores for those with ART was 38.6 at baseline, 41.9 at 6-month follow-up and 40.9 at 12-month follow-up (p > .05); for those without ART was 39.8, 43.8, and 41.6 respectively (p > .05).

Conclusions: The absence of improvement in QOL was surprising given the intense intervention received. Further research is needed to determine the interplay of psycho-socio-cultural factors that affect QOL among HIV-positive villagers in China.

Presenting author email: wuzy@263.net

WEPE0699
Disclosure of their HIV status to HIV-infected children participating in the ARROW trial in Entebbe, Uganda

P. Nahinya Ntigi1, J. Kyarimpa1, M. Bwakura Dangarembizi1, F. Nankya2, B. Kuma3, M. Musinguzi3, M. Thomason2, P. Munderi2, on behalf of the ARROW Trial

1MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda, 2Universty of Edinburgh, Centre for Infectious Disease Centre, Mulago Hospital, Kampala, Uganda, 3Joint Clinical Team

WEPE0700
An assessment of the quality of life of HIV/AIDS patients and their families in Ghana after the implementation of the TAP project


MRC/UVRI Uganda Research Unit on AIDS, Entebbe, Uganda, 1University of Zimbabwe Medical School, Harare, Zimbabwe, 2Baylor-Uganda, Paediatric Infectious Disease Centre, Mulago Hospital, Kampala, Uganda, 3Joint Clinical Research Centre, Kampala, Uganda, 4MRC Clinical Trials Unit, London, United Kingdom

Issues: HIV-infected children depend upon adults for their HIV-related care. It has been suggested that knowledge of HIV status among older children may improve adherence to anti-retroviral therapy (ART). Ugandan, National Guidelines encourages children aged ≥ 8 years be informed of their status but there are few documented experiences of disclosure of HIV status to children on ART.

Description: ARROW is a clinical trial evaluating monitoring strategies and first-line ART in HIV-infected children from Uganda and Zimbabwe. Informed consent to participate in ARROW was given by the child’s primary carer. Trial counsellors encourage carers of children ≥8 years to disclose to them their HIV status at home, but also offer the option of assisted disclosure in the clinic. None of the 189 children (median age 6.6 [IQR: 3.7 - 9.2]; 88 boys/101 girls) recruited to ARROW in Entebbe knew their HIV status at enrolment. Over the past two years, 67 children (65/67 aged ≥ 8 years) have learnt their HIV status through assisted disclosure; two children aged 7 years were also informed of their status as both had been asking questions about tablets, taking. 33/67 (49.3%) carers were biological parents and mostly on ART, and indicated they found disclosure easier than non-biological guardians who understood little about HIV. Information supplied through guidance and support from counsellors was central to the success of assisted disclosure process. Caregivers reported information received during the disclosure process has helped improve children’s adherence to ART.

Lessons learned: Disclosure of their HIV status to children on ART aged ≥ 8 years is an ongoing process which appears fundamental for maintaining adherence to ART. Health care workers, especially non-biological parents, frequently require professional support.

Next steps: Disclosure of a child’s HIV status by all primary carers should be encouraged and be part of the training given to HIV health care workers.

Presenting author email: patricia.nahirya@mrcuganda.org

WEPE0701
Prevalence and predictors of AIDS-related male sexual dysfunction and their relationship to HIV- related sexual orientation in a community-based sample

L.B. Gillis1, G.M. Herek2
1University of Toronto, Adult Education & Counselling Psychology, Toronto, Canada, 2University of California at Davis, Psychology, Davis, United States

Background: The HIV/AIDS epidemic has greatly influenced the quality of life of gay and bisexual men. While many studies have examined the mental health and substance use of gay, and bisexual men, few have examined the impact of HIV/AIDS on the sexual functioning of these men.

Methods: Participants were 327 gay and bisexual identified men (mean age of 36; 76.8% White) who completed face-to-face interviews about their problems in sexual functioning as part of a larger community-based study in Northern California. Sexual problems were assessed in seven areas following the principles of DSM-IV (APA, 1994). The areas of sexual functioning assessed were:

- (1) avoiding sexual contact due to fear of AIDS;
- (2) losing an erection when putting on a condom,
- (3) lack of interest in sex,
- (4) losing an erection when using condoms will discontinue their use. Problems in sexual problems in sexual functioning as part of a larger community-based study in Northern California. Sexual problems were assessed in seven areas following the principles of DSM-IV (APA, 1994). The areas of sexual functioning assessed were:

Results: While only a small number of men reported having problems across multiple areas of sexual functioning, or reported experiencing frequent problems in sexual functioning, over 90% of the men reported experiencing one or more problems in the past year. The number of sexual functioning problems reported was significantly predicted by the men’s perceptions of personal HIV risk, a measure of psychological impact of the HIV/AIDS epidemic, and their comfort with their own sexual orientation, and these predictors explained 16.4% of the variance in a stepwise regression analysis.

Conclusions: The sexual functioning of gay and bisexual men, an important aspect of their quality of life, has been impacted by AIDS. The findings have clear implications for HIV prevention with gay and bisexual men, as those men losing erections when using condoms will discontinue their use. Problems in the sexual functioning of HIV+ men will negatively influence their psychological well-being, and possibly impact their physical health.

Presenting author email: rox.gillis@utoronto.ca

WEPE0702
Quality of life of people with HIV/AIDS receiving antiretroviral therapy in Cuba: a cross-sectional study of the national population

C. Aragonés1, J. Pérez1, J. Campos2, M.C. Smith Fawzi1, Y. Kihara3, K. McPhie3, F. Castro3
1Institute of Tropical Medicine “Pedro Kouri”, Biostatistics and Informatics, Havana, Cuba, 2Institute of Tropical Medicine “Pedro Kouri”, Hospital, Havana, Cuba, 3Harvard Medical School, Global Health and Social Medicine, Boston, United States, 4Albert Einstein College of Medicine, Bronx, United States, 5Albert Medical College, Albany, United States

Background: In Cuba, ART has improved immunologic parameters, increased survival, and diminished the occurrence of opportunistic infections and AIDS-related mortality. However, the effect of the provision of ART on the quality of life (QOL) of people with HIV/AIDS had not been studied quantitatively.

Methods: We conducted a cross-sectional study of the population receiving...
WEPE0703
Food for thought from Free State, South Africa: nutritional status and food security early in the ART treatment career

F. Booysen1, A. Bhargava2, D. de Walque3, M. Over4, C. Walsh5
1University of the Free State, Economics, CSIR/SAOR, Bloemfontein, South Africa, 2University of Houston, Economics, Houston, United States, 3The World Bank Development Economics Sector/DEA, Research Group (DEA/RG), DC, United States, 4Center for Global Development, Washington, DC, United States, 5University of the Free State, Human Nutrition, Bloemfontein, South Africa

Background: PLWHA have high energy requirements. Nutrition is also important in sustaining adherence to ART treatment and in enhancing its long-term efficacy and outcomes. This paper explores the nutritional and food security status of ART patients (males=132; females=67), 5 focus groups (n=25) and 5 key-informant interviews conducted. Difficulties faced, food security status, and health transition outcomes are explored.

Methods: In 2007/08, 648 ART and 207 comparison households were recruited in the respective FEATS cohort study (ethical approval [ethical clear- ance FEATS 145/07]). At baseline, trained enumerators conducted structured, face-to-face interviews with women and comparison households after having obtained written informed consent. Nutritional status was assessed using BMI and food security with USDA’s food security indices. Descriptive and multivariate regression analysis were used to explore levels and correlates of malnutrition and food security.

Results: Nutritional status differs significantly between ART patients, other adults in patient households, and adults from comparison households (p < 0.05). Malnutrition, including severe malnutrition, is significantly more common among ART patients, while obesity is less common. The prevalence of malnutrition among patients however declined by half over the early part of the ART treatment career, with a corresponding rise in the proportion over-weight and obese patients. Food insecurity is significantly more prevalent in patient than comparison households (p < 0.001). One in two patient households was ‘food insecure with severe hunger’. Living in a patient household is associated with a 42.4% smaller likelihood of adults in the household being food insecure, but does not do more than half among children.

Conclusions: Malnutrition and food insecurity pose a major challenge to patient adherence to ART. The one hand, sustainable, effective nutritional support interventions are required to curb food insecurity and hunger, while on the other appropriate health promotion and lifestyle interventions are required to deal with the health problems that may negatively impact on long-run treatment outcomes.

Presenting author email: joyce.perez@kbf-idc.ac.za

WEPE0704
Access and adherence to tuberculosis treatment among people with TB in rural Tamil Nadu, India

V. Chakrapani1, M.K. Vedhanayagam1, D.K. Dakishnamorthy1, E.K.J. Kumar2, C.R.M. Antoniswami3, R. Angamuthu3
1Indian Network for People Living with HIV/AIDS (INP+), Chennai, India, 2University of Toronto, Social Work, Ontario, Canada, 3University of Toronto, Faculty of Social Work, Ontario, Canada

Background: Access and adherence to tuberculosis treatment for IDUs living with HIV can be improved by: providing adequate TB education/counselling; building the capacity of service providers to address individual/healthcare system barriers; initiating programs to increase support from family/society; and linking with alcohol treatment.

Methods: We conducted a survey to determine the effectiveness of diagnostic counselling and testing (DCT) in helping to detect TB-HIV co-infected patients. The DCT was implemented at two government primary healthcare centres in villages.

Results: It was established that a number of co-infected patients was the increase due to the fact that who had issued directives to the health provid- ers to refer alerting patients to diagnostic counselling and testing. Prior to the introduction of DCT, 12% of all AIDs-positive people who were not responding to treatment were dying of the disease. Some patients went to...
Cervical cancer screening (CCS) at an HIV/AIDS care centre: the Mildmay Uganda experience

J. Nangiru1, W. Musoke1, M. Sekyondwaa2, M. Awori3, E. Kikute3, R. Bamatwita4, L. Luyirika5, E. Kawuma4, M. Odiit6, S. Walmsley5, D. Wong7, J. Rehm1,7,8

1Mildmay Uganda, Nursing, Kampala, Uganda, 2Mildmay Uganda, Clinical Services, Kampala, Uganda, 3Mildmay Uganda, Quality Assurance, Kampala, Uganda, 4Mildmay Uganda, Research, Kampala, Uganda, 5Mildmay Uganda, Clinical, Kampala, Uganda

Tuesdays 21 July Poster Exhibition

Purpose: To assess the ability of a supportive care programme to improve adherence to antiretroviral (ARV) therapy.

Methods: A randomised controlled trial of 562 HIV-positive adults in Kampala, Uganda. Participants were randomised to either supportive care or usual care. The intervention included an adherence support tool, education on drug management, and support in accessing health services. Adherence was measured using self-report and electronic pill count. The study followed participants for 24 months.

Results: The mean adherence rate was significantly higher in the intervention group compared to the control group (p = 0.001). The intervention also resulted in a significant improvement in quality of life and psychological well-being.

Conclusions: A supportive care programme can effectively improve adherence to ARV therapy and has the potential to improve quality of life and psychological well-being among HIV-positive adults in Uganda.

WEPE0709 HIV-TB co-infection: diagnosis and treatment for IDUs in Donetsk oblast, Ukraine

S. Makoveev1, M. Kogel2

1All-Ukrainian Network of PLWH, Donetsk, Ukraine, Club ‘Svitanok’, Charity Organisation, Donetsk, Ukraine

Background: Treatment for HIV-TB co-infection has improved significantly, but the proportion of IDUs with HIV-TB co-infection remains high. There is a need for more effective treatment for IDUs in Donetsk oblast, Ukraine.

Methods: We conducted a retrospective analysis of data from 353 IDUs with HIV-TB co-infection in Donetsk oblast, Ukraine. We compared the treatment outcomes of IDUs with HIV-TB co-infection and HIV monoinfected patients.

Results: The overall treatment success rate was 89.2% for IDUs with HIV-TB co-infection and 92.7% for HIV monoinfected patients. The failure rate was 10.8% for IDUs with HIV-TB co-infection and 7.3% for HIV monoinfected patients. The treatment success rate was significantly lower for IDUs with HIV-TB co-infection compared to HIV monoinfected patients.

Conclusions: IDUs with HIV-TB co-infection have a lower treatment success rate compared to HIV monoinfected patients. There is a need for more effective treatment options for IDUs with HIV-TB co-infection in Donetsk oblast, Ukraine.

WEPE0710 Predictors of suboptimal adherence to antiretroviral therapy among HIV monoinfected versus HIV/HCV coinfected individuals

P. Shuper1, N. Joharchi1, H. Irving2, D. Fletcher3, C. Kovacs4, M. Loutfy5, S. Walsley6, D. Wong7, J. Rehm1,7,8

1Centre for Addiction and Mental Health, Toronto, Canada, 2University of Toronto, Toronto, Canada, 3Mayo Clinic Medical City, Toronto, Canada, 4Women’s College Hospital, Toronto, Canada, 5University Health Network, Toronto General Hospital, Toronto, Canada, 6Toronto Western Hospital, Toronto, Canada, 7Dalla Lana School of Public Health, Toronto, Ontario, Canada, 8TU Dresden, Institute for Clinical Psychology and Psychotherapy, Dresden, Germany

Methods: A total of 119 participants with HIV monoinfection and 119 participants with HIV/HCV coinfection completed a self-report measure assessing ARV adherence (4-day; 1-month) and clinically-relevant factors potentially associated with nonadherence. Medical chart reviews were also performed to extract information pertaining to adherence-related social support as well as multisectoral interactions.

Results: Multivariable logistic regression analyses demonstrated that younger age, lower MSAS-physical score, fewer symptoms, greater adherence, and better QOL were independent predictors of non-adherence. Non-adherence measured over one preceding week was associated with poorer physical outcomes. These should be routinely included in ARV adherence assessment.

Conclusions: Younger age, poor physical health, and better adherence are independent predictors of non-adherence. These should be routinely included in ARV adherence assessment.

WEPE0707 Psychological well being and mental health

L. Sherr1, F. Lampel2, R. Harding3, Switching Study Group

1UCU Medical School, London, United Kingdom, 2Kings College London, London, United Kingdom

Background: The psychological well-being and mental health of HIV-positive individuals are important outcomes of HIV care and treatment. However, limited research has been conducted in this area.

Methods: We conducted a longitudinal study of HIV-positive individuals in the UK. Participants were followed for up to two years. The study included assessment of psychological well-being, mental health, and adherence.

Results: The majority of participants reported good psychological well-being and mental health. However, a significant number of participants reported poor adherence.

Conclusions: Psychological well-being and mental health are important outcomes of HIV care and treatment. Further research is needed to improve adherence and mental health in HIV-positive individuals.

WEPE0711 Psychological state predicting HIV treatment outcomes up to two years on. A longitudinal HIV study in the UK

L. Sherr1, F. Lampel2, R. Harding3, Switching Study Group

1UCU Medical School, London, United Kingdom, 2Kings College London, London, United Kingdom

Background: The psychological well-being and mental health of HIV-positive individuals are important outcomes of HIV care and treatment. However, limited research has been conducted in this area.

Methods: We conducted a longitudinal study of HIV-positive individuals in the UK. Participants were followed for up to two years. The study included assessment of psychological well-being, mental health, and adherence.

Results: The majority of participants reported good psychological well-being and mental health. However, a significant number of participants reported poor adherence.

Conclusions: Psychological well-being and mental health are important outcomes of HIV care and treatment. Further research is needed to improve adherence and mental health in HIV-positive individuals.
WEPE0712
Empowering indigenous people with IPT-G management skills to support HIV and AIDS affected individuals to regain functionality: a case of Uganda
A. Kampiza1, 2
1World Vision - Uganda, Ministry Quality Division, Kampala, Uganda, 2Uganda Martyrs University - Nkozi, Institute of Ethics and Development Studies, Kampala, Uganda

**Issues:** Addressing high levels of depression among high HIV-prevalence is a challenge in resource-poor contexts with limited access to clinically-trained practitioners. Interpersonal Psychotherapy for Groups (IPT-G) has been shown in clinical trials to be effective in Uganda, where depression rates of up to 21% have been observed. However, IPT-G is resource intensive as groups are facilitated by clinically trained counsellors.

**Description:** The IPT-G process entails pre-assessment for depressive symptoms, weekly group sessions facilitated by non-clinical social workers, and post assessment using the DSM IV diagnosis of depression. During 2004 to 2007, World Vision Uganda implemented IPT-G achieving 87.9% reduction in depressive symptoms. From July 2007 World Vision has trialed a cost-effective variation of IPT-G, utilizing local community members as volunteers. Forty-five local people from Masaka and Rakai districts received a ten days intensive training in ITP-G administration and World Vision. IPT-G facilitators went on to offer straightforward monitoring and technical support supervision to those locals. Analysis from the 3 completed phases indicates 94% recovery from depression at post assessment.

**Lessons:** IPT-G curriculum has been developed to help caregivers affected by HIV to share their feelings in a group environment and gain from available treatment and support options and increase social connectedness. Interactions between community volunteers and Mentors from University Department of Mental Health and Community Psychology lecturers revealed that the community has gained skilled IPT-G facilitators. Local authorities appreciate and recognize that IPT-G contributes to individu-al, household, and entire community development.

**Next steps:** An IPT-G curriculum has been developed to be taught to university students with a view of institutionalizing the intervention and extending its benefits to a larger scope of society. Presenting author email: ariambrose@yahoo.co.uk

WEPE0714
Does social support affect depression in patients on antiretroviral treatment program in rural KwaZulu-Natal, South Africa?
F. Yeji1, L. Hirschhorn2, K. Klipstein-Grobusch2, T. Barnighausen1
1Navio Uganda Health Research Centre, Naviro, Gana, 2Harvard Medical School, Boston, United States, 3School of Public Health, University of Witwatersrand, Johannesburg, South Africa, 4Africa Centre for Health and Population Studies and Harvard School of Public Health, Durban, South Africa

**Background:** Good and quality social support has been positively associated with mental health and researchers and clinicians are increasingly recognizing the important protective role it plays in people living with HIV/AIDS (PLWA). We investigated whether the mental health (depression) of patients receiving antiretroviral treatment (ART) in a public-sector treatment programme in the rural district of Umkhanyakude, KwaZulu-Natal, South Africa is influenced by social support and strategies to cope with HIV infection.

**Methods:** Depression was assessed in a cross-section of 227 patients (mean age 38 years, range 18-62 years) with the General Health Questionnaire 12 (GHQ12). A GHQ12 score of 4 or higher indicated mental health pathology (depression), while lower scores indicated normal mental health. We re-gressed depression on sex, age, marital status, education, household wealth (measured with a principal component (pc) score summarizing information on water source, energy sources, electricity, home ownership and, 27 to 29 household assets), social support (measured with two orthogonal pc scores, the first capturing largely questions related to “instrumental social support” and the second capturing largely questions related to “emotional social support”), and 6 strategies to cope with HIV infection.

**Results:** Instrumental social support was significantly associated with mental health pathology (OR = 0.65 P < 0.001, 95%CI 0.52 - 0.81). Using avoidance of people of the opposite sex to cope with HIV increased the odds of depression almost threefold (OR = 2.79 P=0.006, 95%CI 1.34 - 5.82), “trying to keep HIV/AIDS from bothering you” reduced the odds of depression by 55% (OR = 0.45 P=0.068, 95%CI 0.20 - 1.06). 33% of patients were depressed indicating that depression is very common in patients on ART in rural South Africa.

**Conclusions:** In addition to drug treatment, interventions improving instrumental social support and changes in two particular strategies to cope with HIV infection may be effective in reducing the burden of depression among ART patients. Presenting author email: yeji@yahoo.com

WEPE0713
Mental health in youth perinatally-infected, affected and unaffected by HIV: a tale of two studies
K.S. Elkington1, R.N. Robbins1, J.A. Bauermeister2, C.A. Mellins1
1Columbia University and New York State Psychiatric Institute, 2Columbia Center of Clinical and Behavioral Studies: Department of Psychiatry, New York, United States, 3University of Michigan, Health Behavior & Health Education, School of Public Health, Ann Arbor, United States

**Background:** Perinatally infected (PHIV+) youth maybe at greater risk for mental health problems compared to other youth. However findings have been inconsistent across studies. Managing a parent/caregiver’s ill-health may substantially impact youth’s mental health, yet few studies have separated the effect of perinatal HIV infection from maternal/caregiver HIV infection on this outcome. We examined the association of youth and care-giver HIV infection, in addition to other key demographic factors, on youth mental health.

**Methods:** Database are pooled from the baseline assessments of two, large, longitudinal studies that examined differences and determinants of mental health and risk behavior outcomes among youth perinatally-infected, affected (caregiver HIV+), and unaffected by HIV, primarily residing in inner-city, im-poverished, communities (total n=545; 36% PHIV+ youth; 50.5% male; 9-16 years; 55.6% African American, 41.3% Hispanic; 45.7% HIV+ caregivers). The association between youth HIV-status, caregiver HIV-status, and youth mental health were examined using multiple linear and logistic regression. Mental health was assessed by the Child Behavior Checklist/Patient report (CBCL/PC).

**Results:** Youth HIV status was not associated with mental health. HIV + caregivers reported significantly lower internalizing (e.g. depression, anxiety), externalizing (e.g. aggression, impulsivity) and total CBCL-P scores (better mental health) for their children compared to HIV- caregivers. HIV+ caregivers had significantly lower odds of reporting diagnostic CBCL-P scores. Several demographics were associated with mental health: age, race/ethnic-ity, caregiver HIV-status, and mental health outcomes of children. There were no significant interactions between caregiver and youth HIV status.

**Conclusions:** Irrespective of youth’s gender and HIV status, youth who received mental health services (primarily from caregivers) had better mental health outcomes. These youth may have better access to medical and psychiatric services due to their greater utilization of mental health services. Youth may have developed adaptive coping strategies that resulted in improved mental health. Building upon these strengths may be an effective focus of interven-tion for this population. Presenting author email: cam414@columbia.edu

WEPE0715
Social support, perceived stigma and quality of life among HIV+ caregivers and adult relatives of pediatric HIV index cases in Kinshasa, Democratic Republic of Congo
J. Newman1, F. Kitele2, J. Lusuma1, A. Tabala1, T. Tikihandu1, P. Lelo2, G. Bokwala2, D. Klzungu2, F. Behets1
1University of North Carolina at Chapel Hill, Health Behavior and Health Education, Chapel Hill, United States, 2Kalemba Lemberi Pediatric Hospital, Kinshasa, Congo, the Democratic Republic of the, 3University of North Carolina at Chapel Hill, Epidemiology, Chapel Hill, United States

**Background:** In Sub-Saharan settings, psychosocial support services are essential for effective HIV care. We explored the relationships between social support, perceived stigma and quality of life (QoL) in HIV+ adults participating in a family-centered pediatric HIV care and treatment program in Kinshasa.

**Methods:** Baseline interviews were conducted with 275 HIV+ adults who were caregivers or first-line relatives of enrolled HIV+ children. Associations between variables were examined using Pearson correlation coefficients. Hierarchical multiple regression was used to test the relationship of social support to QoL moderated by perceived stigma. We examined psychological status, one of six domains in the World Health Organization QoL measure, separately and as part of overall QoL.

**Results:** Our sample was 84% female and largely mothers with low educa-tion. 56% of respondents had not completed secondary school. There was a positive association between social support and psychological status, r = 0.42(234), p < .001 and a negative association between perceived stigma and psychological status, r = -0.31(226), p < .001. The relationship of social support to psychological status was moderated by perceived stigma (B=0.19, p < .05) such that the association between social support and psychological status was positive and stronger for patients reporting high stigma than for patients reporting low stigma. The relationship of perceived stigma to overall QoL was not moderated by perceived stigma (B=0.089, p= .397).

**Conclusions:** These results highlight the importance of assessing multiple QoL domains. By examining psychological status separately, we found sup-port for our hypothesis which we would not have found if only overall QoL had been examined. Enhancing social support may be particularly important for those reporting high stigma in improving QoL. As access to antiretrovi-nal therapy improves, interventions with social support may be particularly important for those with modifiable predictors of QoL such as the psychosocial factors explored here. Presenting author email: newman@rti.org
WEPE0716 Suicidality and HIV - global prevalence, measurement and interventions

L. Sherr1, R. Harding1, J. Catalan1, E. Sibley1, HIV Mental Health Review Group1, UC Medical School, School of Medicine, London, United Kingdom, 2Kings College London, London, United Kingdom, 3Imperial College London, London, United Kingdom, 4UC Medical School, London, United Kingdom

Background: Suicide has long been associated with serious illness generally and HIV specifically. New treatments have affected prognosis but there is an unclear impact on suicide burden (thoughts, self harm and completions). This study examines all published suicide and HIV data for a definitive account of (1) prevalence of HIV-related suicidality (2) measurement, and (3) effectiveness of interventions.

Methods: Standard systematic research methods were used to gather quality published papers on HIV and suicide using keyword data base searches and quality standards plus data extraction.

Results: 332 papers were generated and hand searched resulting in 66 studies for analysis. 75% were African/European, but there was representation from developing countries. 12 measured completed suicides (death records) 5 reporting suicide as a cause of attrition; deliberate self harm was measured in 21, using 22 instruments; 16 measured suicide ideation using 14 instruments, suicidal thoughts were measured in 17, using 15 instruments. Auto-scores showed 9% reported HIV+ individuals had committed suicide; 2.4% HIV+ study participants commit suicide; approximately 20%+HIV+ people had deliberately harmed themselves; 26.9% reported suicidal ideation; 28.5% during the past week and 6.5% reported ideation as a side effect to medication; 22.1% had a suicide plan; 19.7% were generally “suicidal”. Thoughts of ending their own life and; and, 14.4% expressed a desire for death. Three studies recruited over 70% males while over 70% females were recruiting over those who were 66 years old. Only 2 studies focussed on IDUs. Only 3 studies looked at interventions -predominantly information and education. Five studies measured antiretroviral adherence.

Conclusions: Our detailed data suggests that all aspects of suicide are eluded and urgently require routine monitoring and tracking as a standard component of clinical care. Female studies are needed. Measurement needs to be harmonised. There is scant evidence of direct interventions to reduce any aspect of suicidality which needs urgent redress. Presenting author email: l.sherr@ucl.ac.uk

WEPE0718 Depression and self-care symptom management strategies in people living with HIV infection

L. Sansero’1, J. Kemppainen1, K. Kirksey2, P. Nicholas1, I. Corless3, J. Voss4, W. Holzemer5, C. Dawson Rose6, G. McClorey7, C. Portillo8, A. Vesper8

1Rutgers, The State University of New Jersey, College of Nursing, Newark, New Jersey, United States, 2The University of North Carolina at Wilmington, School of Nursing, Wilmington, United States, 3Sonat Family of Hospitals, Austin, Texas, United States, 4MGH Institute of Health Professions, School of Nursing, Boston, United States, 5University of Washington, School of Nursing, Seattle, Washington, United States, 6University of California at San Francisco, School of Nursing, San Francisco, United States, 7Kaiser Permanente Hawaii, Honolulu, United States, 8MGH Institute of Health Professions, School of Nursing, Boston, United States

Background: This study examines all published suicide and HIV data for a definitive account of (1) prevalence of HIV-related suicidality (2) measurement, and (3) effectiveness of interventions.

Methods: Standard systematic research methods were used to gather quality published papers on HIV and suicide using keyword data base searches and quality standards plus data extraction.

Results: 332 papers were generated and hand searched resulting in 66 studies for analysis. 75% were African/European, but there was representation from developing countries. 12 measured completed suicides (death records) 5 reporting suicide as a cause of attrition; deliberate self harm was measured in 21, using 22 instruments; 16 measured suicide ideation using 14 instruments, suicidal thoughts were measured in 17, using 15 instruments. Auto-scores showed 9% reported HIV+ individuals had committed suicide; 2.4% HIV+ study participants commit suicide; approximately 20%+HIV+ people had deliberately harmed themselves; 26.9% reported suicidal ideation; 28.5% during the past week and 6.5% reported ideation as a side effect to medication; 22.1% had a suicide plan; 19.7% were generally “suicidal”. Thoughts of ending their own life and; and, 14.4% expressed a desire for death. Three studies recruited over 70% males while over 70% females were recruiting over those who were 66 years old. Only 2 studies focussed on IDUs. Only 3 studies looked at interventions -predominantly information and education. Five studies measured antiretroviral adherence.

Conclusions: Our detailed data suggests that all aspects of suicide are eluded and urgently require routine monitoring and tracking as a standard component of clinical care. Female studies are needed. Measurement needs to be harmonised. There is scant evidence of direct interventions to reduce any aspect of suicidality which needs urgent redress. Presenting author email: l.sherr@ucl.ac.uk

WEPE0719 Religious involvement or spiritual transformation? Associations with psychological well-being among people living with HIV

L. Kaplan1, H. Kremer2, G. Ironson1

1University of Miami, Sociology, Weston, United States, 2University of Miami, Psychology, Miami, United States

Background: Studies suggest that spiritual/religious involvement is associated with psychological well-being in HIV-positive people. Traditionally, spiritual/religious involvement was measured by church attendance and frequency of prayer. However, a spiritual transformation is defined as a sudden, drastic change in spiritual beliefs accompanied by changes in behaviors, attitudes, and self-views, has been examined with respect to HIV. We examined the association between psychological well-being and spiritual/religious involvement and spiritual transformation. The hypothesis that spiritual transformation is a stronger correlate of psychological well-being than church attendance or frequency of prayer.

Methods: Biographical interviews of 147 HIV-positive people on their key life-changing experiences were analyzed with qualitative content analysis to explore who experienced a spiritual transformation (inter-rater reliability=.80). The Gall-up poll questionnaire measuring attendance and frequency of prayer and the Beck Depression Inventory, State Anxiety Inventory, and Perceived Stress Scale to measure psychological well-being were also measured.

Results: Contrary to prior research, church attendance is not associated with any of the psychological well-being measures. Frequency of prayer is negatively correlated only with anxiety (r=-.22, p<.01). In contrast, spiritual transformation is negatively associated with all psychological measures; depression (r=-.22, p<.01), anxiety (r=-.20, p<.01), and perceived stress (r=-.21, p<.01). Major changes that occurred during spiritual transformation that were documented in the interviews included spiritual intensification, more spiritual practices, positive feelings toward self recovery from substance use, finding new meaning and purpose in life and increase in self-knowledge. The hypothesis that spiritual transformation is a stronger correlate of psychological well-being than church attendance or frequency of prayer.

Conclusions: These results suggest that the traditional measures of spiritual/religious involvement are weaker correlates of psychological well-being than spiritual transformation. More research focusing on the interaction of life changing events and spiritual transformation as key determinants of psychological well-being is needed, in particular with samples who experience substance use problems and underprivileged social status.

Presenting author email: heidemariekremer@yahoo.de
WEPE0720 Risk factors for depression among intravenous drug users (IDUs) receiving antiretroviral (ARV) treatment in Jakarta and Bali, Indonesia

Y Li, R. Hershfield1, I. Iwanta2, O. Karni1, R. Tambunan3, S. Lenggogori1, F. Rusman1,1, I. Levy1
1University of Illinois at Chicago, School of Public Health, Chicago, United States, 2Alma Gay Catholic University of Indonesia, Jakarta, Indonesia, 3University of Denpasar, Indonesia

Background: Depression is common among IDUs living with HIV and is associated with loss of social relationships, increased likelihood of risky behavior, and poor adherence to ARV treatment. Despite these negative effects, little is known about depression among HIV-infected IDUs receiving ARVs in resource-poor countries. This study identifies key factors predicting depression among IDUs in Indonesia.

Methods: Using a provider referral method, we recruited and interviewed 142 IDUs receiving ARVs at three HIV clinics in Jakarta (n = 72) and two in Bali (n = 70). A structured questionnaire was used to collect participants’ demographic characteristics, history of drug use, treatment experiences, and social support. Depressive symptoms were measured using a 9-item version of the Center for Epidemiologic Studies Depression Scale (CES-D).

Results: The average age was 39 years (range 20-62), 93% were male, and high school educated (90%). Thirty-three percent (47) reported using alcohol or illegal drugs and 19% (26) were in methadone treatment. CES-D scores indicated that 28% (40) of participants were depressed. Multivariate regression revealed that depression was positively associated with recent use of substance (OR: 4.6, p=0.003) and being on methadone (OR: 3.6, p=0.02). Older age (per year OR: 0.89, p=0.03), full-time employment (OR: 0.22, p=0.007), and living with parents and being on methadone (OR: 0.19, p=0.03) appeared to have a protective effect.

Conclusions: Similar to other people living with HIV, depression is common among Indonesian HIV-positive IDUs receiving ARVs. Use of alcohol or illegal drugs, in addition to depression, are uncommon occurrence among substance users in general. Methadone and other substance use programs often are directed by mental health providers, thus offering a potential opportunity to incorporate these interventions with depression management. IDUs who are not living with parents or who are unemployed may be at higher risk for depression and should be considered for targeted screening.

Presenting author email: yli73@uiuc.edu

WEPE0721 Spiritual wellbeing among people with HIV in Sub-Saharan Africa: a mixed-methods, multi-centre study

L Selman, R. Harding, I.J. Higgisson, M. Gysels, The Encompass Collaborative (South Africa, Uganda, UK)

King’s College London, Palliative Care, Policy and Rehabilitation, London, United Kingdom

Background: Despite evidence from the USA that HIV impacts on psychospiritual wellbeing, little is known about the spiritual aspects of living with HIV in sub-Saharan Africa. This study aims to describe and explore the spiritual wellbeing of people living with HIV/AIDS (PLWHA), to better understand the implications this has for care.

Methods: Cross-sectional mixed-methods study conducted by local researchers at palliative care services in South Africa and Uganda: A. Translated versions of the Missoula Vitas Quality of Life Index (MVQQLI) administered to a consecutive sample of PLWHA at 5 sites. MVQQLI is a validated tool to tailor the patient’s experience, Function, Interpersonal, Well-being, Transcendent) that are patient-rated for their importance. B. Semi-structured qualitative interviews conducted with a purposive sample of sites. Thematic analysis conducted in Nvivo.

Results:
A. 230 PLWHA interviewed; 76.9% female; mean age female 36.2, male 37.7; 83.9% AIDS diagnosis. Participants rated meaning (mean 4.09) and meaning in life (4.06) as more important to quality of life (Qol) than physical comfort (2.53). 43.4% agreed with the statement: ‘I feel more disconnected from all things now than I did before my illness’. I have less of a sense of meaning in my life now than I have had in the past (33.0%).

B. 43 PLWHA interviewed; 67.4% female; mean age female 34, male 37; 86.0% AIDS diagnosis. Spirituality/religion played central roles in patients’ lives, helping them find peace, accept illness, and maintain hope. Participants described spiritual crises (disillusion with the church, bitterness towards God) and barriers to peace (uncontrolled pain, social rejection, family worries).

Conclusions: Survey data suggest spiritual distress may be highly prevalent and have a potential detrimental effect on Qol. Qualitative findings confirm the central role of faith and spiritual practices in mediating and understanding the patient’s experience. Further research and patient support in this area is needed.

Presenting author email: lucy_selman@kcl.ac.uk

WEPE0722 Mastery and coping buffer the negative effects of stress on health-related quality of life in the OHTN cohort study

S. Rujwali1, K. Gitson, S.B. Bourque1, S. Gardner1, J. Bekele, H. Fenta1
1University of Toronto, Toronto, Canada, 2University of Toronto, Toronto, Canada, 3University of Calgary, Calgary, Canada

Background: This study aims (a) to examine the relationship between stress and health-related quality of life (HRQoL) among people with HIV; and (b) to determine whether psychosocial resources (mastery, coping, social support) diminish the negative effect of stress on HRQoL.

Methods: The OHTN Cohort Study is a longitudinal observational cohort study. A total of 778 participants provided baseline data on demographics (age, gender, ethnicity, sexual orientation, education, employment, income), clinical variables (CD4 counts, viral load, AIDS-defining condition, time since HIV diagnosis), psychosocial factors (stress, mastery, coping, social support), and health-related quality of life (SF-36). We performed hierarchical multivariate regression analyses to evaluate the influence of stress on physical and mental HRQoL, and to test for mastery and coping as moderators.

Results: Most participants were male (85%), middle aged (mean=47, range=18-76), black (97.7%), single (64%), living in urban areas (61.2%), high school education (88%). The top five stressors reported by participants were trying to take on too many things at once (51%), not having enough money to buy the things they needed (49%), having something happen during childhood that scared them so much they thought about it years later (42%), having too much expected of them in school by others (38%), and wanting to move but not being able to (32%). In multivariate analyses, stress had a significant negative effect on physical (β=-0.28, p< 0.01) and mental HRQoL (β=-0.60, p= 0.01). The impact of stress on mental HRQoL was buffered by mastery, and maladaptive coping acted as an antagonistic moderator.

Conclusions: Stress has a significant negative association with physical and mental health-related quality of life among people living with HIV after controlling for potential confounders. Developing interventions that improve mastery and reduce maladaptive coping could help minimize the negative impact of stress on HIV.

Presenting author email: rujwali@uottawa.ca

WEPE0723 The Zvandiri programme: community psychosocial support for HIV-positive children and adolescents in Zimbabwe

N. Willis, M. Pascoe, E. Gwizni, M. Mawdezeke, A. Mutsinze, F. Nugbu, S. Maruwa, P. Gwasera, Chwe, Africaid, Harare, Zimbabwe

Issues: Antiretroviral therapy (ART) has radically altered the life expectancy of children living with HIV/AIDS. Yet their quality of life continues to be affected by psychosocial stressors and their needs are not well understood.

Description: The Zvandiri programme, established in 2004, provides psychosocial support to 600 HIV-positive young people aged 7-21 years across 20 communities in Harare. Activities include 20 monthly support groups, counselling, home visits, adherence monitoring and support, memory work, recreational activities, life skills and vocational training. A child-friendly training and support centre provides an additional venue for counselling, support and training. HIV-positive adolescents and children provide peer support and adherance supporters for their HIV-positive peers, caregivers and health workers. We actively follow defaulters and consequently have high retention within the programme. The programme is linked with clinical HIV services for children within Harare. Children and adolescents are referred from clinics for PSS and training. Children are able to access a combination of professional and peer-led support.

Lessons learned: A combination of community-based PSS interventions provided by appropriately qualified and experienced staff (largely trained nurse counsellors who provide care to positive children professionally) ensures that HIV-positive children have access to sustained quality PSS within their local community. A strength of the programme is that PSS is closely integrated with clinical provision and actively follows up on health related issues in addition to PSS issues. The Zvandiri model was recognised as a best practice model in 2009 by Zimbabwe’s Ministry of Labour and Social Welfare, Programme of Support.

Next steps: HIV-positive children and adolescents will be increasingly involved in the planning and delivery of services, thus harnessing their experiences ensuring that their peers have access to appropriate peer-led support. This will be increasingly integrated in to community clinics in order to complement national treatment programmes.

Presenting author email: nico@maruva.org

WEPE0724 Developing an evidence-based intervention for providing community support to HIV-positive adolescents in Harare, Zimbabwe

W. Mavhu1, J. Berwick2, F. Chirowu1, M. Makamba1, A. Copas3, J. Dirawo1, S. Laver1, N. Willis1, F. Cowan1
1Zimbabwe AIDS Prevention Project, University of Zimbabwe, Harare, Zimbabwe, 2Yale School of Medicine, New Haven, United States, 3University College London, London, United Kingdom, 4UNICEF Zimbabwe, Harare, Zimbabwe, 5Africaid, Harare, Zimbabwe

Background: This study aimed to provide evidence to develop a multi-component community intervention for HIV-positive children to improve their physical and psychological well-being, and their anti-retro viral adherence.

Methods: The study used quantitative and qualitative methods to collect data from HIV-positive support group members. A longitudinal observational study was collected from parents/caregivers, health-care-workers and community members.

Results: Questionnaires were completed by 229 children and adolescents (median age 14 years (range 6-19); 59% female). Risk of common mental disorder was high, with two thirds of participants at risk based on the Shona Symptom Questionnaire. Of those currently taking antiretrovirals and not se-
Aging with HIV - social and behavioural issues

WEPE0728
Social support characteristics among a Brazilian sample of older persons living with HIV/AIDS

L. Eschiatti Prati1, M.C.P. de Paula Couto1, A. Moura1, S. Koller1
1Faculdades Integradas de Taquara - FACCAT, Curso de Psicologia, Porto Alegre, Brazil, 2CEP-Rua, Universidade Federal do Rio Grande do Sul, Instituto de Psychology, Porto Alegre, Brazil

A worldwide increase of cases of HIV/AIDS among the population of 50 years and over has been observed. In Brazil, this is not different. When looking at national numbers, Southern Brazil is the region where a higher number of cases of AIDS are reported for this population (1,550/100,000, while the Brazilian incidence rate is 13.6). One of the protective factors well studied for HIV/AIDS is social support. This study investigated the quality and quantity of social support in older persons living with HIV. A model describing quality of life and personal satisfaction as a function of education, marital status and social support in HIV-infected patients was tested. The sample (104 persons living with HIV, Mage=57; SD=5.5) was recruited in HIV/AIDS health services in three southern cities of Brazil. Participants answered about socio-demographic aspects, social support, life satisfaction, and others. Regarding marital status, 22% of the sample were single, 33.3% married, 20.2% widowed and 23% divorced. The mean of school years was of 6 years (SD=3.64). The sample reported being more satisfied with received emotional support than with received instrumental support. Emotional support had good quality of life and personal satisfaction more than education, marital status and instrumental support. This result indicates that the quality of emotional support is an important feature that contributes to the maintenance of life satisfaction among older persons living with HIV.

Note: This work was carried out by UFRGS and CEARGS with technical and financial support of the Ministry of Health/ Secretariat of Health Surveillance/ National STO, Aids and Viral Hepatitis Programme (MOH/SHS/NAP) through the Project of Cooperation AD/BR/03/H34 between the Brazilian Government and the UNODC. The informed consent was obtained from all individuals and the protocols were approved by the Local Commission on Ethics in Research (LCER) and National Commission on Ethics in Research - NCCR (numbers 2007/014, in 01/10/2007).

Presenting author email: laissa.prati@gmail.com

WEPE0727
What remains unspoken: mental health service needs among African immigrants living with HIV/AIDS in New York

P.Y. Collins
Chapman University of Mental Health/NIH, Office of Global Mental Health, Bethesda, United States

Background: The AIDS epidemic disproportionately affects people of African descent in the United States. African immigrant communities have witnessed a rise in HIV prevalence in recent years. Despite the need for mental health services among many people with HIV/AIDS, Black populations frequently have less access. This qualitative study examined the mental health service needs of African immigrants living with HIV who received legal and social services at a community-based organization in New York City.

Methods: The researcher conducted key informant interviews with staff members at the CBD, representatives of African immigrant communities, and clients of the CBD (N=25). Two focus group discussions with staff and community members were also conducted.

Results: Staff and clients acknowledged that multiple stressors and accompanying isolation occurs commonly among African immigrants living with HIV/AIDS. Clients described significant emotional distress after learning their status and in the context of decision-making around disclosure. Fear of involuntary disclosure often limited options for social support. Yet, mental health services were not always viewed as a viable resource for their needs. Barriers to mental health services included CBO staff members’ lack of knowledge of mental disorders; perceived limited availability of culturally competent mental health service providers; conceptualizations of mental illness as “madness”, associated with shame, loss of control, and the inability to care for oneself and the lack of economic resources to seek services and ongoing care. Facilitators included clients’ concerns that emotional distress could affect the course of HIV and their desire to receive supportive psychosocial interventions at the CBO.

Conclusions: HIV infection and immigrant status create vulnerabilities to emotional distress and, sometimes, mental illness. Simultaneously, cultural and economic barriers limit access to mental health services for this population. Trusted CBOs with culturally competent staff may provide options for readily accessible and acceptable mental health services for African immigrant populations.

Presenting author email: pemacollins@nih.gov

WEPE0726
Current psycho-social and prevention needs in a group of MSM living with HIV in Spain

A. Morales Carmona1, P. Fernández Díaz2, K. Zaragoza Lora2
1Istituto de Salud, Research Unit, Barcelona, Spain, 2Universitat Raman Liut, Faculty of Psychology, Physical and Educational Sciences Blanquerana, Barcelona, Spain

Background: (1) To identify and describe the current needs related to health, psychosocial aspects and HIV protection in a group of MSM living with HIV. (2) To determine whether there have been changes in those needs since the appearance of HIV/AIDS.

Methods: A qualitative study was carried out with 78 men (aged 27-65): 35 in individual interviews and 43 in 5 discussion groups in the cities of Barcelona, Madrid and Palma de Mallorca. The sampling criteria was that eighteen of the participants asked for cosmetic surgery to be included as part of social security and treatment, especially for those newly diagnosed. These demands express emotional needs that must be addressed in a confidential and safe space. The participants ask for cosmetic surgery to be included as part of social security and treatment, especially for those newly diagnosed. Simultaneously, cultural and economic barriers limit access to mental health services for this population. Trusted CBOs with culturally competent staff may provide options for readily accessible and acceptable mental health services for African immigrant populations.
WEPE0729
“Is I get older will the problems get worse?” Fears and concerns of gay and bisexual men over 50 aging with HIV in the UK

L. Power1, G. Broughton1, C. Hansen2
1Terrence Higgins Trust, Policy & Public Affairs, London, United Kingdom
2Mortimer Market Centre, Bloomsbury Clinic, London, United Kingdom

Issues: With current antiretrovirals, increasing numbers of PWHIV are living longer without having planned for a future. Numbers of PWHIV over 50 in the UK are set to double by 2014. Services need to respond.

Description: THY’s SoPurs research project with Age UK covers a range of instruments including a quantitative survey and qualitative interviews with PWHIV over 50. PWHIV are involved at every level of the research. The HMS data was collected online and paper surveys distributed to PWHIV across the UK in 2009. 325 HMS over 50 aged between 50 and 78 (mean: 56.1), diagnosed between < 1 and 28 years ago (mean: 14.5) responded. 63% described their health as ‘very good’ and 9.1% as ‘bad’/ ‘very bad’. 73.8% had a CD4 count > 351 and 4.9% were < 200. Major concerns expressed for the future were financial difficulties (63.9% very or most important); inability to care for self (62.8%); inability to access proper healthcare (62.4%) and stigma (32.3%). In open ended responses, men also expressed fear of the unknown in ageing with HIV/HIV/AIDs; fear of elder services that may stigmatise HIV or homosexuality; and concern about future HIV services.

Lessons learned: Elder and HIV organisations need to realign current services and policy priorities to respond to these needs around money, health care and self-care and to reduce fears of stigma and manage uncertainty. There is a need for a learning exchange in addition to service realignments.

Next steps: Data on PWHIV over 50 responding will be further analysed and compared with a similar cohort in ACRIA’s USA study. Learning will be shared with PWHIV, funders and other services and policymakers.

Presenting author email: lisa.power@tht.org.uk

WEPE0730 Implementing an HIV/STD prevention intervention targeting older adults at risk for HIV and older adults living with HIV: Adapting an effective behavioral intervention: community promise (peers reaching out and modeling intervention strategies)

L. Scacabarrozzi, H. Hessema
AIDS Community Research Initiative of America (ACRIA), HIV Health Services, New York City, United States

Issues: Nationally, according to the Centers for Disease Control and Prevention (CDC), people over the age of 50 now account for almost 27% of those infected with HIV, and they comprise the fastest growing segment of the HIV-positive population. In New York City—the epidemic’s North American epicenter and a strong predictor of national trends—a third of the city’s 100,000-plus infected individuals are over 50, and the proportion is growing steadily as a result of new infections. Older Adults lack targeted HIV primary and secondary prevention information, adequate and sensitive access to HIV testing, effective STD prevention messages or information that leads them to make appropriate decisions about their HIV treatment and care needs.

Description: A community-level intervention based on several behavior change theories. A community assessment process is conducted, peer advocates are recruited and trained from the target population, role model stories are written from interviews with the target population, and these stories are distributed along with other risk reduction materials to target audiences to help people move toward safer sex or risk reduction practices. Community PROMISE can target any population, since it is created anew each time it is implemented in collaboration with the community.

Lessons learned: • HIV-positive people over 50 are largely cut off from needed HIV prevention and care services, healthcare and social services, socially isolated, and doubly stigmatized by HIV-phobia and ageism • Adults over 50 face many physical, psychological, and social challenges of growing older while managing their HIV medically and dealing with the social and psychological issues that come with the virus.

Next steps: • Targeted age appropriate HIV/STD prevention and care messages/images for older adults • HIV education and prevention services for older adults, and the development of networks comprised of those serving people with HIV and those serving people over 50.

Presenting author email: htessema@acria.org

WEPE0731 Ageing and HIV/AIDS: a qualitative study of the experiences of older HIV-positive gay men living in London, UK

G. Owen1, J. Catalani1
1Peninsula Medical School, University of Exeter, Institute of Health Services Research, Exeter, United Kingdom, 2Central North West London NHS Foundation Trust, South Kensington and Chelsea Mental Health Centre, London, United Kingdom

Background: The proportion of HIV-positive people over the age of 50 is rapidly increasing in the UK, which partly reflects improved prognosis and decreased mortality since the successful introduction of anti-retroviral therapies. Ageing with HIV is relatively uncharted territory for both HIV-positive people and health professionals.

Methods: Life-story narrative interviews were conducted with 10 HIV-positive gay men whose ages ranged between 50 and 77.

Results: Emergent themes included: • Uncertainties of a contested chronic illness • Continued impact of loss and trauma • Ambivalence & ennui • Coping with ageism • Sex & relationships • Benefits, employment & retirement • Housing & care homes • Importance of partnership with HIV specialist services • Resilience, wisdom & opportunity

Conclusions: Uncertainty has always been a characteristic of HIV infection, but whereas it was once particularly associated with the uncertain prognosis of the life threatening illness, now it has become increasingly associated with difficulties in distinguishing chronic HIV related symptoms from the processes of ageing. Many older gay men have accumulated significant losses in the history of the HIV epidemic which continue to impact on their experience of coping with HIV in later life. The “anti-retroviral moment” is interpreted by some long-term survivors as a “miracle” providing an unexpected opportunity to live into older age; whereas for others it is a moment of ambivalence, marking the continuation of an irreparable struggle with HIV. This research highlights a number of issues which can inform the development of HIV support services for older people.

Presenting author email: gareth.owen@pms.ac.uk

WEPE0732 Community-based service responses to ageing with HIV

B. Westcott1
ACON, Client Services, Sydney, Australia

Issues: One of the definitive issues for people living with HIV is growing older and experiencing a more complex ageing process. This requires services that target people with HIV to accommodate an ageing population. The experience of ageing with HIV occurs earlier in life (compared to HIV-negative counterparts) and can result in years, and perhaps decades, of the need for support services for some HIV-positive people. The relatively new territory of ageing with HIV presents challenges to contemporary HIV service provision.

Description: ACON’s client group displays great resilience. Service uptake by people with HIV who are ageing is done for the purpose of minimizing the negative impact of the ageing process at an earlier stage in life. Services need to consider the complexities of this target population.

Next steps: The experience of ageing with HIV will grow along with advances in HIV medicine. Service programs will continue to evolve and collect necessary data for evaluation purposes. HIV and ageing is relevant for all HIV service providers.
**WEPE0734**

Older adults’ disclosure of HIV status to religious congregations: its relation to HIV stigma and evidence for a “disclosure syndrome”

M. Brennan1, S. Strauss2, S. Karpiak1, D. Tietz2

**Background:** While many religious congregations have responded compassionately to the HIV epidemic, stigma remains a problem for many with HIV. Stigma inhibits disclosure and consequently, the support received from one’s congregation. It is believed that HIV disclosure to the congregation is related to disclosure to other groups and to various components of stigma experience by older adults with HIV. This study will comprise over half of HIV cases in the U.S. by 2015.

**Methods:** Data were obtained from the Research of Older Adults with HIV study (ROAH; Brennan et al., 2010), containing 547 men, 249 women, and 10 transgender people 50 years of age and older. They were 55.5 years on average with a mean age of 12.6 years since HIV diagnosis. MANOVA was used to test the Berger (2001) HIV Stigma Scale and subscales (Disclosure Concerns, Personal, Public, and Self-Image) by disclosure to the congregation and by gender. Disclosure to family, sex partners, drug buddies, friends, social/political organizations, coworkers, and health care providers was examined with chi-square tests.

**Results:** Forty-seven percent had not disclosed to their congregations. Those not disclosing to the congregation had significantly higher Disclosure Concerns, Public and Self-Image HIV stigma subscale scores. Although men had significantly higher Personal stigma scores than women, this domain was not related to disclosure to the congregation. Those not disclosing to their congregations were significantly less likely to disclose to any other group. Gender did not have a significant effect on these patterns.

**Conclusions:** Among older adults with HIV, failure to disclose to one’s congregation is significantly related to higher levels of HIV stigma. Such stigma is also at the root of a syndrome of nondisclosure among this population that deeply impacts religious congregations. Stigma-reducing interventions and outreach are still needed to eliminate the stigma experienced in the congregation and that reaches beyond the religious congregation. Interventions and outreach is also at the root of a syndrome of nondisclosure among this population.

**WEPE0735**

Sexual positioning, sorsorting, and disclosing behaviors associated with risk for unprotected anal intercourse in HIV-positive MSM aged 40 and older

S. J. Jacob1, M. I. Fernandez2, R. L. Dwyer3, G. S. Bowen4

**Background:** The number of MSM aged 40 and older in the United States living with HIV is increasing yet little is known about factors that influence their sexual behaviors, such as sorsorting and sexual positioning. The goal of this analysis was to examine factors associated with unprotected insertive and receptive anal intercourse (USAI; URAI) in HIV-positive MSM aged 40 and older.

**Methods:** Between December 2007-2008 we recruited a community-based sample of 802 self-identified MSM over 40 in South Florida, U.S. from community venues (e.g., bars, gyms, social clubs) to complete an anonymous, paper-and-pencil questionnaire. Using data from a subset of 233 self-reported HIV-positive MSM aged 40 to 82 years (M=51 years; SD=8.7), we employed exploratory analysis and regression analysis to determine the influence of age, income, smoking, sexual position, relationship status, employment status, race, education, immigration status, and religious and medical adherence on sexual behaviors.

**Results:** Younger age (odds ratio [OR] = 0.94; 95% confidence interval [CI]: 0.9, 1.1), higher income (OR=1.73; 95% CI: 1.1, 2.7), and not disclosing HIV status with partners (OR=2.1; 95% CI: 1.1, 4.1) and practicing safe sex with outside partners but not with partners (OR=1.9; 95% CI: 3.4), were significantly associated with USAI. Younger age (OR=0.91; 95% CI: 0.9, 0.9), white race (OR=0.9; 95% CI: 0.3, 0.8), and not using condoms with HIV-negative partners (OR=0.5; 95% CI: 0.3, 0.8) were associated with higher risk for URAI.

**Conclusions:** Midlife MSM who are HIV-positive continue to be sexually active and engage in high-risk behaviors for HIV transmission/reinfection. Drug use reduction and safe sex-building strategies for HIV-disclosure should be woven into HIV risk-reduction interventions for this underserved and at-risk group.
**WEPE0738**

*I left this study feeling glad:* benefits from participation of HIV+ individuals in a behavioral trial

R. M. Pate,

1 Columbia University, School of Social Work, New York, United States

2 HIV Center for Clinical and Behavioral Studies, New York City, United States

Background: Benefits from participation in HIV behavioral clinical trials have not been systematically demonstrated. This study aimed to determine the benefits HIV-positive adults drew from participation in a behavioral intervention, the Healthy Living Project (HLP).

Methods: We analyzed qualitative data from participants in New York City, who answered open-ended questions during their final follow-up assessment. These questions focused on the specific benefits participants drew from the intervention beyond the main outcome of the intervention - to decrease number of unsafe sexual acts. Participants used a computer to type their answers. Textual data were coded independently by two coders following standard procedures for content analysis (data sampling, finding themes, building codes, and interpretation).

Results: Of the 196 respondents, 64% were Black, 23% Latinos, 10% White, and 1% other/other. 95% of respondents identified as heterosexual, 30% as homosexual, and 12% as bisexual. The mean age of respondents was 41.0 years (SD = 7.0), and ages ranged from 24 to 61. Thirty-four percent of respondents were married, and 60.2% had a high school education or higher. Respondents in both arms of the trial reported a range of benefits in three areas of their lives. HLP improves 1) respondents’ lives (“HLP has taught me how to live again”), 2) their relationships (“It gave me insight to how another person feels”), and 3) their self-concept (“I was given information that helped better understand myself”).

Conclusions: This study offers an opportunity to better understand what motivated participants to continue to participate in behavioral trials, and how they might be encouraged to continue to participate in future trials. Presenting author email: mvgwadz@gmail.com

**WEPE0739**

Peer-driven intervention increases rates of enrollment in clinical trials among persons living with HIV/AIDS from racial/ethnic minority backgrounds

M. Gwadz,

1 Columbia University, College of Nursing, New York, United States

2 National Development and Research Institutes, Inc., Institute for AIDS Research, New York United States, 3 Beth Israel Medical Center, Division of Infectious Disease, New York, United States, 4 Columbia University, School of Public Health, New York, United States

Background: In the U.S., persons living with HIV/AIDS (PLHA) from racial/ethnic minority backgrounds are underrepresented in HIV clinical trials (ACTS). PLHA gain access to ACTs through a screening process, but minorities face serious individual, social, and structural barriers to ACTs and are screened at very low rates. This study examined the efficacy of a peer-driven behavioral intervention (PDI) to increase rates of screening among minority PLHA in New York City.

Methods: A randomized controlled trial design examined the efficacy of the PDI compared to a time- and attention-matched control. PDI consisted of structured small group and individual sessions (6 hours) and the opportunity to engage in three ACTs. Participants were recruited using respondent-driven sampling (N=342). Many (43.9%) participants were female, most (88.3%) were aged 41 years or older, and 91.5% were racial/ethnic minorities (64.9% African-American, 26.6% Latino). Most in both arms (93.3%) completed all intervention sessions and 61.4% recruited/educated peers. Baseline and 16 week follow-up, semi-structured interviews were computer-assisted. Most (94.4%) completed follow-up interviews. A logistic mixed model was used to examine intervention and other effects on screening to the point of determining eligibility for ACTs while accounting for clustering of participants in recruitment chains.

Results: About half in the PDI (46.0%) were screened compared to 1.6% in the control group. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Thirty-four percent were female, 88.3% were aged 41 years or older, and 91.5% were racial/ethnic minorities (64.9% African-American, 26.6% Latino). About half in the PDI (46.0%) were screened compared to 1.6% in the control group. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Participants in both arms (93.3%) completed all intervention sessions and 61.4% recruited/educated peers. Baseline and 16 week follow-up, semi-structured interviews were computer-assisted. Most (94.4%) completed follow-up interviews. A logistic mixed model was used to examine intervention and other effects on screening to the point of determining eligibility for ACTs while accounting for clustering of participants in recruitment chains.

Results: About half in the PDI (46.0%) were screened compared to 1.6% in the control group. About half in the PDI (46.0%) were screened compared to 1.6% in the control group. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Participants in both arms (93.3%) completed all intervention sessions and 61.4% recruited/educated peers. Baseline and 16 week follow-up, semi-structured interviews were computer-assisted. Most (94.4%) completed follow-up interviews. A logistic mixed model was used to examine intervention and other effects on screening to the point of determining eligibility for ACTs while accounting for clustering of participants in recruitment chains.

Results: About half in the PDI (46.0%) were screened compared to 1.6% in the control group. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Participants in both arms (93.3%) completed all intervention sessions and 61.4% recruited/educated peers. Baseline and 16 week follow-up, semi-structured interviews were computer-assisted. Most (94.4%) completed follow-up interviews. A logistic mixed model was used to examine intervention and other effects on screening to the point of determining eligibility for ACTs while accounting for clustering of participants in recruitment chains. Presenting author email: mgwadz@gmail.com

**WEPE0740**

Providing universal access to services for people living with HIV in the Karaganda region of Kazakhstan

E. Bishok

1 PF, Karaganda, Kazakhstan

Issues: At the beginning of 2010, there were 13,794 cumulative cases of HIV in Kazakhstan. Over 70% of these people are unemployed and 68% are injecting drug users (IDUs). The majority of the 989 patients diagnosed with AIDS live in the Karaganda Region. To improve social conditions for people living with HIV (PLHV) and to reduce the impact of the region’s epidemic, projects that provide medical and social services to PLHV are being implemented.

Description: Public Association ‘Credo’ runs projects that increase the accessibility and effectiveness of prevention, care, treatment and social services to PLHV, IDUs and their families. These projects coordinate action between HIV prevention programmes, strengthen strategic partnerships and raise awareness among target groups through seminars and trainings. Crucially, a multi-disciplinary team, including a doctor, nurse, social worker and peer consultant work in close partnership to provide combined medical and social services. Altogether, 735 clients have participated in client management programmes. 496 have accessed counselling services, 212 have received guidance on palliative care, and 212 people have used the project hotline. Meanwhile, 3,542 informational materials have been distributed and support groups have been set up for PLHIV and their families. Overall, the project has reached 2,038 people.

Lessons learned: Close cooperation with governmental and non-governmental organisations have greatly improved the referral of clients between services. Support groups have brought in new clients and reduced stigma and discrimination towards PLHV.

Next steps: The development of a new work model for the multi-disciplinary team will improve the reach of existing medical, social, legal and information services for PLHV. This model also allows for further consolidation of long-term partnerships with governmental and non-governmental organisations. Presenting author email: credokrg@gmail.com

**WEPE0741**

The impact of gender roles and expectations on the timely uptake of antiretroviral therapy in Malawi

F.R. Parrot1, C. Mwafulirwa2, S. Floyd2, R. Houben2, J. Glynn3, A. Cramp1, S. Nkhazay1, N. French4, T.E. Muletta5

1 London School of Hygiene and Tropical Medicine, Infectious Disease Epidemiology Unit, London, United Kingdom, 2 Karonga Prevention Study, Karonga District, Malawi

Background: Providing treatment late in the course of HIV disease is associated with higher mortality and morbidity. This study explores gender disparities in timely access to antiretroviral therapy (ART) and the social processes that sustain them.

Methods: Baseline cohort data on 365 clinic attendees in Karonga District, Malawi were used to examine associations between socio-demographic characteristics and WHO clinical stage at screening using multivariable logistic regression. Semi-structured interviews were conducted for patients stratified by gender and WHO stage were used to establish the social context of treatment seeking, men and women’s behaviour and motivations to seek treatment. Men described their own ill health as the primary motivator, leading them to acknowledge to themselves and others that the need for treatment was greater than the loss of respect, dignity and sexual partners involved in illness and violence through skills building, income generation and other empowerment activities like functional literacy. This built capacity for economic

**WEPE0742**

Strengths and costs of a peer-driven intervention to increase screening for cervical cancer among female sex workers in Addis Ababa, Ethiopia

T.E. Muletta

1 London School of Hygiene and Tropical Medicine, Infectious Disease Epidemiology Unit, London, United Kingdom, 2 Karonga Prevention Study, Karonga District, Malawi

Issues: About half in the PDI (46.0%) were screened compared to 1.6% in the control group. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Thirty-four percent screened were Black, 31.5% were Latinos, 12.7% were White, and 1.5% were other/other. Participants in both arms (93.3%) completed all intervention sessions and 61.4% recruited/educated peers. Baseline and 16 week follow-up, semi-structured interviews were computer-assisted. Most (94.4%) completed follow-up interviews. A logistic mixed model was used to examine intervention and other effects on screening to the point of determining eligibility for ACTs while accounting for clustering of participants in recruitment chains. Presenting author email: mvgwadz@gmail.com
WEPE0743
Are healthcare workers accessing HIV care and treatment services? Some insights from Zimbabwe

T. Mukueteke1, M. Gleshaw2, D. Patel3, B. Engelman4
1Organisatior for Public Health Interventions and Development, Harare, Zimbabwe; 2Ministry of Health and Child Welfare, Murambinda Mission Hospital, Buhera, Zimbabwe

Issues: In Zimbabwe, it has been observed that healthcare workers are slow to access treatment services, despite their advanced knowledge of HIV. This poses a challenge to potentially easier access to care and treatment. It is, however, not clear why healthcare workers delay seeking access to HIV care and treatment services.

Description: An anonymous survey was carried out to ascertain baseline information on health workers' preferences and health care seeking patterns in accessing HIV prevention, care and treatment services. The questionnaire was distributed to all healthcare workers on duty (n=85) at Murambinda Mission Hospital, Buhera, Zimbabwe. All levels of healthcare providers participated, from general hands to doctors. Concerns were raised by healthcare workers about confidentiality and despite efforts made to reassure them of anonymity, return rates for the questionnaire were poor with only 40 questionnaires being returned. Results showed that most respondents (n=29) had accessed HIV testing services at their “own” health care centre; three had been tested elsewhere; while eight had never been tested. All respondents expressed the need for separate and confidential services for staff to be guaranteed a regular supply of ARV drugs. Although trained in HIV issues, healthcare workers felt they needed additional advice, information and support to take in HIV care and treatment issues regarding themselves.

Lessons learned: HIV-related stigma is still high among healthcare workers. Prioritizing healthcare workers for treatment without providing separate confidential services is inadequate in encouraging health workers to seek HIV care for themselves. There is a need for specific private counselling services for healthcare workers.

Next steps: Health institutions need to better define and enhance HIV services for their own workforce, moving beyond the provision of post exposure prophylaxis. Services must be stand alone, acknowledging worker’s rights to privacy.

Presenting author email: mmhpmtct@mweb.co.zw

WEPE0744
Free ARVs and third-line regimens in Cameroon: issues and challenges

B. Dihermente Andou1, L.M.J. Issao2, R. Mekou3
1Cameroon National Network of PLWHA’s, Board of Directors, Yaounde, Cameroon; 2AIVIC, Coordination, Yaounde, Cameroon

Background: Cameroon has about 60000 HIV infected people, 6400 of whom are under ARV treatment; some for a decade now. Concern arose in AIDS control associations when we faced a difficult case, which resulted in an urgent medical evacuation to Europe. We reacted as members of the social committee of the civil society monitoring the fight against HIV / AIDS in Cameroon.

Our work aimed at evaluating the number of HIV-positive people under treatment, victims of treatment failures in Cameroon.

Method: We conducted a survey using a questionnaire in groups of PLWHA’s care units and authorized treatment centres in Yaounde. The question was to know under treatment patients: problems related to ARVs (side effects or opportunistic infections present despite the ongoing treatment, or discontinuation of treatment). In some cases, we sought the opinion of the physician before making conclusions. We noted that remarkable results after processing the questionnaires.

Results: In-depth interviews with 83 HIV-positive women and 38 key informants were undertaken, with permission from Watiersrads and Walter Sisulu universities, and provincial health departments.

Results: Research identified considerable weaknesses within operational service delivery, including: missed opportunities for testing in antenatal care due to test kit shortages; insufficient staff assigned to HIV services; late payment of lay counselors with consequent absenteeism; and delayed transcription of CD4 results into patient files (delaying ART initiation). By contrast, individual actors underwent access encompassed transport costs; psychosocial concerns: fear of positive test result, partner’s reactions, and stigma.

Conclusions: A single system- or individual-level delay reduced the likelihood of women accessing ART or PMTCT. These delays, when concurrent, often signalled wholesale denial of prevention and treatment. This research illustrates how health systems themselves serve as a social determinant of health, with health personnel acting to stop the lines of action - as vital connectors to testing and counseling; or as providers of support and strategies for adherence, disclosure and formula feeding. Such interventions are necessary against the backdrop of dominant socio-cultural norms concerning infant feeding and enteral HIV stigma. In Cameroon, health personnel missed service delivery opportunities due to absenteeism or burnout. Recommendations from this study include: ensuring autonomy over resources at lower levels; linking performance management to facility-level HIV program performance; developing accountability systems; improving HIV services in labour wards; ensuring quality HIV care and feeding counseling; formal monitoring and evaluation for performance management; and, robust systems for data collection and utilization.

Presenting author email: vblack@fhvu.co.za

WEPE0745
Mitigation program for children affected by HIV from injecting drug users (IDU) parents in Jakarta, Indonesia

E. Sukaningrum1, N.E. Sitoniu2, S. Hasan3, L.L. Hidaji4
1Atma Jaya Catholic University of Indonesia, Psychology, Jakarta, Indonesia; 2Atma Jaya Catholic University of Indonesia, Jakarta, Indonesia; 3Atma Jaya Catholic University of Indonesia, Medicine, Jakarta, Indonesia

Issues: The highest HIV prevalence in Indonesia is among IDU populations, causing high risk of HIV infection and serious problems for their sexual partners and children. Children have to face some challenges, such as changes in caregiver and family composition, parent’s addiction, unstable family condition, health and psychosocial problems. They also have a risk of being neglected, lack of care, malnurishment, and the possibility for losing their parents due to HIV.

Description: Program were funded by UNDP/PPH from February 2009 and supervised by Atma Jaya Catholic University of Indonesia. The program aimed to reduce HIV impact and improve the living conditions of the children of IDU. There are 123 children and 88 HIV + IDU parents participating in this program. The program provides health services; such as basic health, home care treatment, nutrition, health education for parents, and psychological care services; such as child life education, counseling, art activities, outbound training, therapeutic play, support group, and recedure. Contraceptive based programs are conducted by involving public leaders, religion leaders, parents, and teachers.

Lessons learned: Working with children and HIV+IDU parents were challenging. Some parents were struggling with addiction and need addiction counseling. Discrimination and stigmatization to these children happened within their own families, in the health service facilities, and in schools and community. Orphanage and poverty were two issues that make the problems became more complicated, because parents or caregivers are critical to ensure the program’s success.

Next steps: The program’s sustainability is important considering in Indonesia HIV community-based program for children are either unavailable or restricted to a small area. Advocacy is needed to prevent discrimination and stigmatization. Parents need more opportunities accessing livelihood programs to empower themselves. Joint cooperation between stakeholders, government, and organizations is needed to improve the mitigation program’s success for HIV affected children.

Presenting author email: eiv.sukma@yahoo.com

WEPE0746
Health system weaknesses restrict access to ART and PMTCT for women and children in South Africa

C. Sprague1, M.F. Chersich2, V. Black3
1University of the Witwatersrand, Graduate School of Business Administration, Johannesburg, South Africa; 2University of Ghent, International Centre for Reproductive Health, Dept of Obstetrics and Gynaecology, Ghent, Belgium; 3University of the Witwatersrand, Reproductive Health and HIV Research Unit, Faculty of Health Sciences, Johannesburg, South Africa

Background: In-depth interviews with 83 HIV-positive women and 38 key informants were undertaken, with permission from Watiersrads and Walter Sisulu universities, and provincial health departments.

Results: Research identified considerable weaknesses within operational service delivery, including: missed opportunities for testing in antenatal care due to test kit shortages; insufficient staff assigned to HIV services; late payment of lay counselors with consequent absenteeism; and delayed transcription of CD4 results into patient files (delaying ART initiation). By contrast, individual actors undergoing access encompassed transport costs; psychosocial concerns: fear of positive test result, partner’s reactions, and stigma.

Conclusions: A single system- or individual-level delay reduced the likelihood of women accessing ART or PMTCT. These delays, when concurrent, often signalled wholesale denial of prevention and treatment. This research illustrates how health systems themselves serve as a social determinant of health, with health personnel acting to stop the lines of action - as vital connectors to testing and counseling; or as providers of support and strategies for adherence, disclosure and formula feeding. Such interventions are necessary against the backdrop of dominant socio-cultural norms concerning infant feeding and enteral HIV stigma. In the treatment, health personnel missed service delivery opportunities due to absenteeism or burnout. Recommendations from this study include: ensuring autonomy over resources at lower levels; linking performance management to facility-level HIV program performance; developing accountability systems; improving HIV services in labour wards; ensuring quality HIV care and feeding counseling; formal monitoring and evaluation for performance management; and, robust systems for data collection and utilization.

Presenting author email: cbblack@fhvu.co.za
WEPE0747
Assessment of palliative care services at ART treatment sites that received training in PC: the AIDSReef Uganda experience
E. Mugisa1, H. Seruyange1, A. Ekwero1, R. Nasaba2, B. Kakizzi1, R. Imakit2, A. Edozien1
1University of Maryland School of Medicine, Clinical Services, Kampala, Uganda, 2University of Maryland School of Medicine, Institute of Human Virology, University of Maryland School of Medicine, Kampala, Uganda, 3University of Maryland, School of Medicine, Institute of Human Virology, Baltimore, United States

Issues: Effective Palliative Care (PC) is essential in management of pain and other symptoms including cancer care in persons with HIV/AIDS.

Description: A standard check list was administered to clinical staff during routine technical assistance visits between June 2009 and September 2009 at 18 ART clinics supported by AIDSReef. All sites had atleast one doctor, nurse and counselor trained in PC; counseling and spiritual support were fully integrated and enhanced with community volunteers. Most sites (13/18, 72.2%) had functional referral systems and linkages to Hospice Africa Uganda. Common symptoms were pain, fever, cough and headache. Sixty-six percent (12/18) clinics had access to morphe for pain management. NSAIDS and medicines for fatness of other symptoms were available at all 18 sites. Definite diagnosis of cancer was a challenge in 16/18 clinics; two clinics performed biopsies and histopathology on cancer suspects. Only one site could offer anti cancer treatment. (p<0.001).

Lessons learned: 1) ART treatment sites with providers trained in PC are likely to identify and manage pain and other common symptoms of persons with HIV. 2) Use of a check list is helpful in monitoring and comparing service delivery at sites. 3) Intermittent morphine supply at sites negatively impacted ability to manage pain.

Next steps: Strengthen pain and symptom control by ensuring availability of necessary medications. Improve ability to detect, diagnose and manage cancer. Enhance PC training through continuing clinical education sessions and onsite mentorships.

Presenting author email: emmanmugisa@yahoo.com

WEPE0748
Connecting with care: development of a care linkage video for HIV+ substance users in New York City (NYC)
H. Wolfe1, E. Benoit1, D. Haller1, V. Sharp1
1St Luke’s Roosevelt Hospital Center, Center for Comprehensive Care, New York, United States

Background: Many persons in NYC who know they have HIV do not get needed care. Most of these are active substance users; their use is a major barrier to care. Innovative community-based care linkage interventions are greatly needed.

Methods: As part of a National Institute of Drug Abuse grant, we developed a 45+ Peer-administered care linkage intervention (PEERLINK), based on Motivational Interviewing (MI) and Role Model Stories. In collaboration with a HIV+ Peers in recovery from addiction, we produced a video to be shown as part of PEERLINK. Initially intended as a “virtual tour” of outpatient clinic for hard to reach patients, with Peer input a storyline emerged incorporating MI and Role Model Stories, featuring the journey of a female Peer (her real story, acting herself in the video) from crack cocaine use and untreated HIV, to being fully engaged in care for both, to becoming a Peer.

Results: The final 11 minute video will be shown. Trained Peers have presented it to 30 HIV+ substance users randomized into the intervention group. All four Peers rated the video as among the most highly effective intervention component (5 on a 1-5 scale); Peer comments on patients’ response to the video were: “WOW. They LOVED it. Seeing the patient lying in bed, like they have cancer treatment. (p=0.001).

Conclusions: Should the intervention show promise, further trials with components analysis can determine whether the video is useful as a stand-alone tool. In addition, we will develop a video for persons who are either in prison or have been in prison and are in early stage care; factors that influence enrollment, and immediate psychosocial concerns.

Presenting author email: hewolf@chpmnet.org

WEPE0749
Newly-diagnosed HIV+ in South Africa: do men and women enroll in care?
S. Hoffman1, D. Singh2, E. Kelvin1, N. Lewis1, K. Blanchard1, L. O’Sullivan1, T.M. Enner1, J.E. Mantell1, G. Ramjee2
1HIV Centre for Clinical and Behavioral Studies, Columbia Univ, Psychiatry, New York, United States; 2Medical Research Council, HIV Prevention Research Unit, Durban, South Africa, 3Ibis Reproductive Health, Johannesburg, South Africa, 4Ibis Reproductive Health, Cambridge, United States; 5University of New Brunswick, Psychology, Fredericton, Canada

Background: Despite the roll-out of ART in southern Africa, life-threatening delaying factors to accessing ART are a growing concern. To date, studies of treatment delay have been conducted among those already receiving care; informing those newly diagnosed. Though the proportion of newly-diagnosed individuals who enroll in care, factors that influence enrollment, and immediate psychosocial concerns.

Methods: We estimated the proportions of newly-diagnosed HIV+ individuals who, at three months, reported disclosing their serostatus and obtaining HIV care among primary individuals undergoing HIV testing at two types of venues in Durban, South Africa (men and women at a general medical care clinic (PHC); and (2) 141 women presenting for screening to participate in a microbiode trial (MT)).

Results: Of the 214 tested, 73 were HIV+ (44% PHC women; 44% men and 29% MT). Of those 70 (63 women, 7 men) reported being newly diagnosed (96%). Among the newly-diagnosed, 56% had elevated depressive symptoms and 31% had clinical symptoms associated with AIDS. Sixty-one (87%) were successfully followed up to their second ART visit. Their serostatus and 56% had sought HIV-related medical care. Trial site men were less likely to have sought care than men and women diagnosed at the PHC (33% vs. 82%; p<.01). However, there was no difference in the proportion who disclosed (75% vs. 68%). Gender, depressive symptoms, and clinical symptoms were unrelated to care-seeking. None of the newly-diagnosed elevated depressive symptoms were more likely to report on enrollment in care following diagnosis (44% in this sample) may represent a significant proportion of those initiating ART late or not at all, suggesting the need for strong referral and follow-up proce- dures at this early stage. Routine testing without such procedures may fail to increase the number receiving timely ART.

Presenting author email: dins.aignh@nrc.ac.za

WEPE0750
Experience of implementing social projects in prisons of the Karaganda region of Kazakhstan
G. Smailova1, L. Kartashova1, A. Alkhemzyanova1
1Kazmir, Karaganda, Kazakhstan, 2AIDS Foundation East-West (AFEW), Amsterdam, Netherlands

Issues: In 2009, there were 536 new cases of HIV infection registered in the prison system of Kazakhstan. In the context of a burgeoning epidemic, new approaches to HIV prevention in prisons became necessary between the governmental and non-governmental sectors. Client management of inmates, including the provision of medical, legal and psychological support, and assists former prisoners in their socio-psychological adaptation to life on the outside. The cycle of poor support for inmates reintegrating back into society, difficulties with documentation and employment, marginalisation, discrimination and risky behaviours all contribute to the spread of HIV.

Description: NGO ‘Umit’ runs a project in the prison system of Kazakhstan entitled ‘We Want to Live’ with the support of the Central Asian AIDS Control Project. The project focuses on the social and psychological adaptation of prisoners and former prisoners to life outside prison; it includes peer support and assists former prisoners in their socio-psychological adaptation to life on the outside. The cycle of poor support for inmates reintegrating back into society, difficulties with documentation and employment, marginalisation, discrimination and risky behaviours all contribute to the spread of HIV.

Next steps: The project has demonstrated its effectiveness and the necessity of replication, and plans to develop similar intervention in other regions.

Presenting author email: aiman_umit@mail.ru

WEPE0751
The START programme: best practice in transitional client management of inmates in Kazakhstan
S. Ankushcheva
Pr. Aalmty, Kazakhstan

Issues: By January 2010, there were 13,784 cumulative number of officially registered HIV cases in Kazakhstan, 3,981 of which were registered in pris- ons. These figures reveal much about role of prisons in Kazakhstan’s epidemic. Most inmates are injecting drug users and they often return to society after release with a range of unprovided solutions, such as: lack of support, drug use, compulsions arising from overdose, infectious diseases and a high risk of re-offending. NGO ‘Fakel’ has worked in the prison system since 2004 and is the only organisation in Kazakhstan that recruits inmates as peer educators. They work with NGOs, partners and other non governmental organisations to develop and implement peer education programmes.

Description: In 2008, ‘Fakel’ launched the ‘START Programme: Transitional Case Management’ with the support of Dutch humanitarian organisation AIDS Foundation East-West (AFEW). The project aims to raise awareness among inmates about HIV, tuberculosis, STIs, hepatitis and treatment adherence, to decrease risky behavior; and to expand access to pre- and post-release medical and social services.

WePE0751-001.png
START Programme encourages inmates to participate in HIV prevention and treatment programmes within prisons, helps those recently released to reintegrate back into society and decreases reoffending rates.

Presenting author email: svetlan.ankushcheva@fakel.ru

www.aids2010.org • Abstract Book Volume 1 | XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria
Factors associated with delayed first consultation after HIV diagnosis in the ART era. Results from the French VESPA study (ANRS EN-12)

M. Suzan-Monti1,2, L. Fugon3,4, F. Marcellin1,3, F. Lert2, Y. Obadia1,4, L-P. Fournié1,4, M.B. Canesse1,4, G. Palat2,3, S. Nair4, J. Amon1, R. Schleifer1

1INSERM UMR912, Marseille, France, 2Université Aix Marseille,IRD, UMR-S912 Marseille, France, 3ORS PACA, Observatoire Régional de la Santé des Alpes Côte d’Azur, Marseille, France, 4INSERM U0678-IFR 69, Villejuif, France

Background: Delayed initial consultation after HIV diagnosis contributes to less effective medical management and delayed antiretroviral therapies (ART) initiation. We aimed to identify factors associated with a delay of ≥ 6 months between HIV diagnosis and the first medical consultation in a representative sample of HIV+ people in France.

Methods: In 2003, the national survey VESPA (ANRS-EN12) was conducted among a random sample of individuals, representative of HIV-infected outpatients followed up in French hospital departments delivering HIV care. Data about patient experience with and recourse to the health care system were collected from face-to-face interviews. Patients diagnosed HIV+ from 1997 onwards, a key year for protease inhibitors becoming widespread in France, were included in the analysis. A Poisson regression model was used to identify the factors associated with a delay ≥ 6 months.

Results: Among the 986 patients diagnosed HIV+ from 1997 onwards, 89% reported having their first consultation during the month following diagnosis, 8% reported between 1 and 12 months following diagnosis, 2% reported 12 or more months and 3% more than 1 year after diagnosis. Factors independently associated with a delay ≥ 6 months were: younger age at HIV diagnosis (IRR[95%CI]: 0.95 [0.92 - 0.98]), HIV infection through intravenous drug use (8.21 [3.81 - 17.69]), living abroad at the time of HIV diagnosis (5.40 [2.36 - 12.27]) and men having sex with men (MSM) who had a sero-positive partner (3.18 [1.42 - 7.13]).

Conclusions: Despite free and widespread access to HIV medical care and ART in France, a minority of people living with HIV still experience considerable delays before consulting after diagnosis. As delayed access to ART is the major determinant of differential HIV progression rates, these results underline the need for tailored counseling actions and interventions for this minority, including counseling with a cross-cultural perspective.

Presenting author email: pmcarriero@aol.com

WEPE0753 Palliative care: needs of and availability for people living with HIV in India

D. Lohman1, G. Palat2,3, S. Nar1, J. Amon4, B. Schijfste1

1INSERM UMR912, Marseille, France, 2Université Aix Marseille,IRD, UMR-S912 Marseille, France, 3ORS PACA, Observatoire Régional de la Santé des Alpes Côte d’Azur, Marseille, France, 4INSERM U0678-IFR 69, Villejuif, France

Issues: India has made considerable progress rolling out anti-retroviral treatment (ART) for people living with HIV in the past decade, with nearly 2 million people currently receiving treatment according to UNAIDS. However, palliative care services have been poorly integrated into the roll-out of ART. Although studies in several countries show considerable palliative care needs among people living with HIV, including those on ART.

Description: We conducted research in the states of Karnataka and Andhra Pradesh to assess the prevalence and treatment of pain and other symptoms in people with HIV on ART. We surveyed 140 people in Karnataka and more than 500 in Andhra Pradesh in a cross-sectional study using the NCPM (Nagpur, India), a tool developed specifically for palliative care. We also interviewed key informants to assess the awareness and treatment of palliative care needs in HIV care and treatment programs.

Results: More than a third of people surveyed in Karnataka and almost half in Andhra Pradesh reported pain. Ninety percent of people surveyed in Andhra Pradesh reported an average of nine symptoms. Only one third of those who reported pain in Karnataka received any treatment; none had received opioid analgesics. Interviews with key informants identified two primary barriers to palliative care integration into HIV care and treatment: a complete absence of training of doctors on palliative care and the lack of palliative care medications at healthcare institutions that provide services to people living with HIV.

Next steps: Given the considerable symptom burden and inadequacy of their treatment, palliative care should be integrated into India’s HIV response. The National AIDS Control Organization should provide healthcare workers with basic training in palliative care. All healthcare providers that provide services to people living with HIV should ensure the availability of essential palliative care medications.

Presenting author email: schijfste@hrw.org

WEPE0754 Closing the gap on unmet mental health needs of people with HIV

G. Westcott1, K. Saloner1

1ACON - Australia’s largest community-based service provider to people with HIV - has seen a rise in the demand for counseling services for people with HIV in relation to mental health issues.

Description: The ACON counseling program offers an intake and assessment service followed by appropriate internal or external referral to relevant services. Initial referral includes short-term counseling (up to 6 sessions), medium-term counseling (up to 6 months) or enhanced care (case coordination in consultation with an individual’s general practitioner).

In the 2008/9 year, ACON’s counseling staff provided in excess of 13,000 occasions of service. That year services were provided to 193 people with HIV (36% of our total client group for the year). Of these clients, 104 – or 54% - presented with issues categorized as ‘psychological’ or ‘mental health’-related. The prevalence of people with HIV presenting at Intake with these issues gives a prevalence of 42%.

Lessons learned: Demand for counseling/therapeutic interventions in relation to ‘mental health’ appears to be increasing amongst people with HIV. Delivering services in relation to this need can sometimes be complex, often requiring formal psychiatric assessments, medical involvement and close co-ordination of care, especially where suicidal ideation is present. Working in partnership with organisations and practitioners providing relevant services is essential and an integral part of effective service delivery.

Next steps: ACON is currently working towards the development of an organizational mental health strategy, as well as advocating for community-driven mental health groups; Mental Health First Aid for HIV+ people; closer collaboration with community mental health services; supporting the development of HIV-specific community service delivery models; local, regional and national finding means for mobilising preventative programs to increase mental health literacy through education programs.

Presenting author email: gwestcott@acon.org.au

WEPE0755 Rural HIV-infected women: access to services in California

C. Earnquist1, H. Huew1, B. Topal2, S. Mutima3, S. Sori2, Y. Maldonado2

1Stanford University, Stanford, United States, 2Save the Children USA, Bangladesh Country Office, Dhaka, Bangladesh, 3Asian Aids Society (AAS), Dhaka, Bangladesh

Background: Women are one of the fastest-growing populations at risk of HIV infection in the U.S., but minimal data are available on their service needs. This study looks at such needs among women in rural California.

Methods: Intensive, face-to-face interviews were conducted with 64 HIV-infected women living in rural areas and receiving HIV care at one of eleven randomly selected healthcare facilities in California.

Results: The greatest unmet need was assistance with finding a healthcare provider for ongoing medical care (62% who needed this service could not access it). This was followed by the need for housing (47%), finding housing or shelter (44%), and volunteer support services (44%). The most commonly-reported reasons that women could not access services were: (1) they did not think that the service was available in their area, or (2) they did not know where to go or who to call to access the service.

Conclusions: HIV-infected women living in rural areas of California have trouble accessing basic services. It is concerning that a chronically-ill population has trouble connecting with care and support services, especially when evidence that having a “medical home” is important for positive health outcomes. Furthermore, it is well-established that HIV-infected individuals who lack stable housing have worse health and social outcomes. Therefore it is important that housing options be available. In summary, there is a need to address provision of basic needs among this population of HIV-infected women.

Presenting author email: cleas@stanford.edu

WEPE0756 Major challenges in health care for people living with HIV in Bangladesh

A. Z. Urm1, I. Khandaker2, C. N. Roy1, M. S. Alam1, S. Choudhury1, F. Sultana1, H. Akhter3, T. Azim2

1International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), Dhaka, Bangladesh, 2Tuohoku University, Sendai, Japan, 3Save the Children USA, Bangladesh Country Office, Dhaka, Bangladesh, 4Asian Alo Society (AAS), Dhaka, Bangladesh

Background: A total of 1,745 cumulative cases of HIV are recorded in Bangladesh up to the end of 2009. However, estimates suggest that there are 7,500 people living with HIV (PLHIV) in the country. Most of the PLHIV are from rural areas and scattered all over the Bangladesh. Providing effective healthcare services to all PLHIV is essential but in order to do so an understanding of the barriers is required. The study was designed to assess the barriers to providing effective healthcare services to PLHIV.

Methods: Thirteen focus group discussions (FGDs) were conducted with 49 PLHIV and 53 service providers. The data were collected during March and April 2008 from six divisional cities in Bangladesh. They were then thematically analyzed on the basis of repeated issues. Written consent was taken from all participants; all FGDS notes and audio records are kept in a locked cabinet and are only accessible to the investigators.

Results: Healthcare services for PLHIV are currently limited and centralized. Most PLHIV access PLHIV-centric services provided by NGOs. There is a lack of coordination amongst NGOs; limited funds result in inability to provide regular services to PLHIV and their needs may not match the services provided to them. Unemployment and poverty are major hindrances for PLHIV to access available services. Stigma and discrimination against PLHIV still exist in different forms within the community and in the health facilities. These service providers providing services to PLHIV also feel discriminated against by other service providers. Families are the ultimate care providers for PLHIV, but support for these family members is not available.

Conclusions: The barriers identified are at different levels - policy, community and service providers. Better coordination between different agencies may overcome some of these barriers. Presenting author email: arunthia@gmail.com
WEPE0757
Utilization of HIV-related services by members of people living with HIV/AIDS networks in Northern Uganda

D. Segg, L. Ciccio, F. Frewikikomo, A. Ocero, M. Makumbi
Rutumikul, Uganda

Issue:
In Northern Uganda an estimated 120,000 individuals are HIV-infected but only 15% are on ART. Complementary interventions are therefore needed to help the people living with HIV/AIDS (PHAs) prevent the occurrence of opportunistic infections and living a healthy life. PHA-related interventions that are widely recommended are cotrimoxazole prophylaxis therapy (CPT), HIV testing of the discordant partner and of children, tuberculosis (TB) screening and family planning (FP). In Northern Uganda, access to these services is often hindered by distance, lack of information, stigma and drug stock-outs.

Description:
In northern Uganda, most PHAs are members of local networks that provide peer support and psychological care, offer basic information on positive living and assist them in accessing care through linkage to facilities and services that improve their quality of life.

Lessons learned:
Participants were 101 adult PHAs (80 female and 21 male). Despite the median walking distance from the nearest facility being 96 minutes, 89 (88%) reported having attended the HIV clinic in the last three months where 62 (70%) were clinically screened for TB. Ninety participants were regularly taking CPT. Of all respondents, 66 (65%) had disclosed their status to their partners and 49 (48%) to their children. Of the 66 who disclosed, 52 (79%) of their spouses had also been tested for HIV. Approximately 51% of all children eligible for HIV testing living in the respondents’ households had also been tested. Only 29 participants (29%) reported using any family planning method.

Next steps:
Increasing utilization of HIV-related health services among PHAs is possible even in rural settings. Involving PHAs themselves can be effective if they are organized in groups and groups whose membership can be beneficial for mutual help, positive living and referral for services that improve their quality of life.

Presenting author email: dsseg@mutuaganda.org

WEPE0758
"Because I have HIV": perceptions of ARVs and care and treatment centers among HIV-positive clients in Northern Tanzania

J. Clearfield, E. Churchman, E. Mackey, S. Gervas, M. Mtundo, A. Urno, W. Ngal
1Support for International Change, Arusha, Tanzania, United Republic of
2Support for International Change, Babati, Tanzania, United Republic of

Background:
Support for International Change (SIC) is a nongovernmental organization that supports people living with HIV (PLWH) in rural communities in northern Tanzania. SIC Community Health Workers (CHW) provide care and link PLWH to care and treatment centers (CTC) through cash transfers or medical clinics. CTC attendance is important for receiving antiretroviral medications and regular examinations to assess health. However, client perceptions of ARVs and CTC attendance are largely unknown.

Methods:
In 2009, SIC completed a program assessment to better understand the perceptions of ARVs and the CTC. 36 HIV-positive clients were interviewed regarding their understanding of regular ARV adherence and CTC attendance.

Results:
• 66.7% of clients reported that they take ARVs to prolong life and reduce their viral load.
• Over 30% reported not knowing why they must take ARVs or simply, “The doctor told me to.”
• 47% reported that they must take their ARVs at regular intervals to “Prevent resistance” or so “The virus won’t grow.”
• Nearly 40% of clients reported not knowing why they must take their ARVs at regular intervals.
• CTC travel was mostly attributed to illness or travel. We found that clients who are ill frequently send the CHW to CTC to collect their medications. In some areas, CHWs usually handle clients’ CTC attendance cards and attend CTC in their stead.
• Many clients reported perfect CTC attendance despite not physically attending CTC, suggesting that clients understand CTC as merely a place to receive medication.

Conclusion:
Lack of understanding ARV’s understanding of ARVs and CTC attendance will allow for improved support. Further research is needed on why some clients do not attend CTC as biweekly, and how CHWs can better promote both adherence and attendance at CTC.

Presenting author email: emily@sichange.org

WEPE0759
Access to care for HIV-positive drug users in a slum community of Bangkok, Thailand

M. Chihabra, V. Suwananikijj, V.M. Quan, M. Pownee, U. Janneago, C. Beyrer, D. Celentano
1Johns Hopkins Bloomberg School of Public Health, Baltimore, United States
2Human Development Foundation - Mercy Centre, Bangkok, Thailand

Background:
HIV infection rates in drug users remains high in Thailand, particularly in injection drug users. The Kong Teyo Slum in Bangkok houses many marginalized populations, including impoverished migrants, men who have sex with men (MSM), and drug users. Since 2004, using a peer-driven, community-based approach, the Human Development Foundation (HDF) has helped expand access to ART in this community, in parallel with expansion of Thai public ART initiatives.

Methods:
The records of all adult clients (≥18 years) enrolled between 2004 and 2010 were reviewed. Basic demographic and clinical variables such as who are current or former drug users were compared with those who were not using with odds ratios and 95% confidence intervals calculated using PASW Statistics 18, Version 18.0.0. Statistical significance is defined as p< 0.05.

Results:
Of the 689 individuals enrolled in the program between 2004 and 2010, 15.7% were current or former drug users. Compared to clients who have never used drugs, they were less likely to have been treated with ART (OR 0.81; 0.67-0.99) and more likely to have dropped out during follow-up (OR 1.33; 1.02-1.74). They also tended to have lower mean CD4 counts at presentation, younger age at death, and a shorter time between HIV diagnosis and death. (Results not statistically significant) They were also less likely to be eligible for Thai social security healthcare benefits (OR 0.21; 0.07-0.66).

Conclusions:
HIV-infected Kong Teyo slum residents with a history drug use are significantly less likely to access treatment, were eligible for fewer public treatment program options, and experienced lower clinical outcomes compared to their counterparts who have never used drugs. An examination of other significant barriers to care and expansion of appropriate treatment options are urgently needed for this population disproportionately affected by HIV.

Presenting author email: usaree@mercycentre.org

WEPE0760
The provision of palliative care to offenders living with HIV/AIDS in South African prisons

Z. Sithole
Hospice and Palliative Care Association of South Africa, Advocacy, Cape Town, South Africa

Issues:
Almost one quarter of sentenced offenders in South African prisons are HIV-positive. Between January 2008 and March 2009, a total of 219 sentenced offenders died from illnesses while incarcerated. In 2008 a television documentary was aired on the conditions of offenders in South African Prisons. Harrowing footage showed an infected offender suffering excruciating pain as he lay dying. The sincere attempts of his cell mates to assist his pain and discomfort proved futile. This programme highlighted the need for palliative care within prisons.

Description:
Through persistent and targeted advocacy, collaboration between the Hospice Palliative Care Association of South Africa and the Department of Correctional Services was initiated. Pietermaritzburg Facility A and Durban Facility B within the province of KwaZulu/Natal, a province with the highest prevalence of HIV/AIDS, were chosen for the pilot program to provide full time nursing care and referral facilities for all sick offenders in KwaZulu/Natal. The task teams have been formed from both Hospice and Department of Correctional Services. A Service agreement was signed by the two organisations. Department of Correctional Services and hospice members agreed that a mixture of designated beds and mobile trained staff would be the best approach to take.

Lessons learned:
Palliative care and pain relief is a human right. With the right approach and collaboration, hospice services can be provided within prisons. Having palliative care in prison means that there will be more offenders who will be able to access palliative care. Once the Kwa-Zulu Natal project is up and running this project is going to be rolled out to other provinces.

Next steps:
Hospices from Durban and Pietermaritzburg agreed to provide both training and mentorship to the relevant health care professionals within these two Correctional Services facilities.

WEPE0761
Amplifying voices, highlighting concerns: impact of the earthquake on the HIV-positive people in Haiti

I.C. Louis, A. Mishra
Panos Global AIDS Programme, Port-au-Princ, Haiti

Issues:
On January 12, 2010 an earthquake of catastrophic magnitude hit Haiti’s capital, Port-au-Prince. It left 200,000 people dead, 250,000 injured, one million homeless and many more displaced.

At the time there were 120, 000 people living with HIV in Haiti. Initial reports estimate that just under 70, 000 Positive People lived in the earthquake affected area, 19,000 of those were on antiretroviral treatment (ART). Limited information is available on how the Positive People are coping with this disaster. Prior to the earthquake Haiti was considered a success story in the response to HIV. But the current situation is threatening to impede all the gains.

Description:
Panos Haiti has been working on HIV and AIDS on the island for the past fifteen years. It helped in facilitating the first support group of Positive People in Haiti and built capacities of Positive People in communicating their concerns. Simultaneously the organisation, Positive People to HIV services and helped fight stigma by training journalists to report sensitively on AIDS.

In the aftermath of the quake , Panos Haiti would intensify its current work to highlight the impact of the quake on access of Positive People to HIV services, and available relief efforts.

Lessons learned:
Positive People are extremely affected by the crisis. All major health infrastructures are destroyed in the affected areas. Continued access to life saving medicines and services to thousands of people living with HIV remains a big challenge. Over 500,000 people depend on the capital to get to the provinces. Networks of People Living with HIV report that they urgently need food and water, tents, and hygiene kits.

Next steps:
Panos Haiti will amplify the voices and concerns of the Positive People, in Haiti, and to policy makers in the North through innovative communication tools and the media.
Results of a regional assessment that reviewed migrants’ vulnerability to HIV and their access to prevention services during different stages of the migration process

F. Teny et al.

Issues: Across southern Africa, people are engaged in multiple forms of migration due to economic and environmental uncertainty, to seek income opportunities in multiple locations is a sound risk-management strategy. Population mobility is seen as a key driver of the HIV epidemic in the SADC region, and may have contributed to the rapid spread of the disease over the last decade.

Description: This study focuses on migrant workers and their partners in seven labour sectors: commercial agriculture; construction; domestic work; informal de Côrtes Econômicas, Centro de Desenvolvimento e Planejamento Regional, Belo Horizonte, Brazil; Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Evaluation of the scale up of palliative care (PC) in a coastal region in Tanzania

Lessons learned: The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

Issues:

The findings stress the need to increase HIV testing and awareness among mobile and migrant populations in SADC countries and mobile and migrant populations in selected locations identified as “spaces of vulnerability”.

Method:

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.

The main factors that increase migrant workers’ and their partners’ vulnerability to HIV infection include: long periods away from home; multiple and concurrent sexual partnerships; dangerous working conditions; single-sex accommodation; boredom and loneliness; impoverished social environments and lack of access to IEC materials.
WEPE0767
Addressing care needs beyond ART: a mixed-method study to measure multidimensional needs among HIV outpatients in two African countries

King’s College London, Department of Palliative Care, Policy and Research, London, School of Hygiene & Tropical Medicine, Mtwara, Tanzania, United Republic of, African Palliative Care Association, Kampala, Uganda, African Palliative Care Association, Nairobi, Kenya, 4Kenya Hospices and Palliative Care Association, Nairobi, Kenya

Background: Although ART provision is far from complete in African, clinical services are developing in response to the problems and needs expressed by people with HIV disease. Little is known about the multidimensional (i.e. physical, psychological, social and spiritual) aspects of care as these are usually examined in isolation. This study aimed to determine the prevalence and severity of problems in HIV outpatients in Kenya and Uganda.

Methods: Patients (n=273) were recruited into a stratified (by number of patients) random sample of 96 facilities. Groups discussed the care received and their need, and experiences of care. In Phase 2, patients completed the MOS-HIV (quality of life) and the APAHA African POS (palliative domains) at 12 facilities. The POS was scored 0-5 for all items, with 5 being the worst status.

Results: Patients in focus group discussions (n=228) in Uganda, 242 in Kenya identified the existence of psychological support services, social interventions to reduce stigma, and reliable drug availability. Further social needs were identified for ART adherence and costs to access care. Patients who completed outcome data in Uganda and Kenya (n=641/696) had high physical function (30.2/69.2%, fully active, and only 0.2/4.1% completely disabled). The majority were WHO stage 2 or stage 3. With respect to physical problems, moderate/severe/overwhelming pain (scores 2-5) in Uganda and Kenya respectively was reported by 50.0/64.1%, living alone adj. PRR=2.39 (95%CI: 1.42; 4.14) of having 1-2 co-residents, adj. PRR=1.65 95%CI: (1.33, 2.05) compared to 3 or more co-residents, being married (adj. PRR=1.39 95% CI: [1.10, 1.75]), or a CD4 count >250 cells/ul (adj. PRR=1.82; 95%CI: [1.36,1.46])

Conclusion: The integrated qualitative and quantitative findings offer important evidence for the multidimensional nature of need. Attention to physical, psychological, social and spiritual care is essential. Failing to provide palliative care is unlikely to optimise quality of life and maximise gains from ART adherence.

Presenting author: email: richard.harding@kcl.ac.uk

WEPE0768
Socio-psychological support for PLHIV, a necessary condition for commitment to treatment. The results of 26 projects in Russia

J. Zanchitskova
Palliative Care Development, Barnaul, Russian Federation

Issues: Access to HIV treatment is not only the availability of antiviral drugs. Ensure access - which means to form a system of integrated approach to providing medical and psychosocial services to PLHIV. The system of care for HIV in Russia is working quite effectively, especially since 2006, when it was organized access to HAART, but it didn’t solve the problems with adherence, as well as in society there are many misconceptions about HIV, fear stigma and discrimination.

Description: From 2006 through 4 rounds of financing from Russia to the Global Fund is supporting the development of a range of services for psycho-social support (non-medical service - NMS). The main objective of this direction - increasing adherence to treatment. Since 2007 NGO "Positive development" administers this area of work in 24 regions of Russia. We evaluated the activities of 26 projects in this area and quality of service delivery, developed a system for monitoring and evaluation of projects, organized and conducted a range of training activities for staff of these projects.

Lessons learned: Projects NMS allow PLHIV to form an adequate idea of HIV, study skills crisis management, the skills of active participation of PLHIV in decision making regarding their health, including adherence to treatment of HAART, drugs on schedule and systematic monitoring health, skills, prevention of stigma and discrimination. The most important principles of an effective project - are creating an atmosphere of tolerance, equal treatment and inclusion of PLHIV.

Next steps: For the further development of projects NMS requires systemic support in the field of training, standardization and institutionalization of the quality of services, seeking opportunities for financial sustainability of projects in the future.

Presenting author: e-mail: zanchitskova@actruss.ru

WEPE0769
Non-enrolment into a free HIV care program: findings from a population-based study in Rakia, Uganda

1Rakia Health Sciences Program, Kalisizo, Uganda, 2Makerere University School of Public Health, Entebbe, Uganda, 3Asociacion PROSA, Lima, Peru, 4National Institutes of Allergy and Infectious Diseases, Bethesda, United States, 5Johns Hopkins Bloomberg School of Public Health, Baltimore, United States

Background: Optimizing HIV care requires information on the overall population of HIV+ persons in need of services and determinants of failure to seek care.

Objective: To determine factors associated with failure to seek free HIV care by HIV sero-positive adults aged 15-49 years in the Rakia Community Cohort Study (RCCS), Uganda.

Methods: HIV+ study participants in the RCCCS who accepted voluntary counseling and testing (VCT) were referred to the Program’s HIV clinics nearest to them. Services provided included cotrimoxazole prophylaxis, CD4 monitoring, treatment of opportunistic infections and when indicated antiretroviral therapy, all provided free of cost. Data on socio-demographic characteristics and CD4 count were obtained. We estimated adjusted Prevalence Risk Ratios (adj PRR) of non-enrolment into care six months after knowledge of one’s HIV+ status by socio-demographic characteristics and CD4 counts >150 cells/ul using log-binomial regression model.

Results: 1,145 HIV+ participants in the RCCCS accepted VCT and were referred for care. None were referred for care. 31.5% (361/1145) did not enrol into HIV six months after referral. Non-enrolment was significantly higher among men (38%) compared to women (24%) (adj PRR=1.76; 95%CI: [1.46; 2.12]), living alone (adj PRR=2.42; 95%CI: [1.49; 3.86]) of having 1-2 co-residents, adj. PRR=1.65 95%CI: (1.33, 2.05) compared to 3 or more co-residents, being married (adj. PRR=1.33 95% CI: [1.10, 1.75]), or a CD4 count >250 cells/ul (adj. PRR=1.82; 95%CI: [1.36,1.46])

Conclusion: In a setting of community-based free HIV care, about a third of HIV+ persons failed to utilize services. Perceived healthier status (high CD4 counts), younger age, being male, married, or few co-residents were strong determinants of failure to enroll into care, suggesting a need for targeted strategies to enhance service uptake.

Presenting author: e-mail: gnalugoda@hrsp.org

WEPE0770
Advocacy with health ministry for access to the treatment in Peru

J. C. Cruz
Association PROSA, Lima, Peru

Issues: Social Monitoring and Policy Advocacy

Description: In light of the continuing shortage of ARVs in the country, PROSA, an organization of people living with HIV implements a network of contacts with Mutual Aid Group (GM’s) nationwide, which provides information on critical points in the provision of retrovirals. The first level monitoring is done through communication with HIV Strategy, Ministry of Health, Regional Health and Office of the Ombudsman, which may resolve the problem in the shortest time. At a second level, the incidence is supported by press releases and email alerts to national level, taking as allies the media. In that sense we have implemented in our web portal (www.prosa.org.pe) a room for complaints. Since 2007 PROSA reported shortages of retrovirals in 24 hospitals in the country, managing to make available about 8 Press Releases and 2 alerts, and solve 6 cases of shortages in consultation with the HIV strategy at central level. Was reported 6 cases of discrimination the same as those solved by the intervention of the Ombudsman’s Office, Ministry of Labor and Protection of Health

Lessons learned: Following the execution of Social Monitoring and Advocacy was able to advance policy to empower PLHIV and deepen the reasons for the critical nodes in the provision of ARVs. We have learned to demand rights that correspond to PLHIV, by monitoring cases and possible solutions, and making visible the need to implement new policies on health.

Next steps: Designing an effective communication mechanism between the Ministry of Health, people affected and the ombudsman to ensure the timely availability of retrovirals in the framework of respect for human rights.

Presenting author: e-mail: julioacarruur@gmail.com

WEPE0771
Increasing access to primary healthcare for people living with HIV/AIDS: lessons from a Canadian urban aboriginal healthcare context

D. Littlejohn1, A. J. Browne1, V. L. Smye1, C. Varcoe1, S. Wong2
1Vancouver Native Health Society, Vancouver, Canada, 2University of British Columbia, School of Nursing, Vancouver, Canada

Background: Effective and responsive health care continues to be inaccessible for many Indigenous communities worldwide. In Canada, contemporary manifestations of colonialism in public health settings, seeking to address economic and health inequities between Aboriginal people and other Canadians. Alongside substance use and mental health problems, which disproportionally affect Aboriginal people, health inequities are most exemplified by steadily...
increasing rates of HIV among Aboriginal people and decreasing rates of HIV among others. The ineffectiveness of ‘mainstream’ health care in meeting the needs of people marginalized by social and systemic inequities call for alternative approaches to care. In this paper, we report on findings from a partnership-based study that explores how primary health care services are provided in an urban Indigenous healthcare context to meet the needs of people marginalized by systemic inequities and living with HIV/AIDS. The study is being conducted at two long-standing Urban Aboriginal Health Centres in Western Canada.

Method: Drawing on Indigenous epistemologies, postcolonial and critical theory, ethnographic methods were used to conduct (a) individual and group patient interviews \( n = 68 \), (b) staff/provider interviews \( n = 38 \), (c) observations at both Centres, and (d) analyses of organizational policy documents.

Results: The Centres’ models of care builds bridges among patients, communities, and providers to address barriers to effective, safe and responsive care including: systemic racism/discrimination; distrust; consequences of residential schooling; poverty; lack of education, adequate housing and culturally responsive services. Strategies to increase access include: a shared philosophical approach to care; increased awareness of provider/patient power differentials; addressing the socio-economic and historical contexts of people’s lives; critical self-reflection on clinical practice; and interdisciplinary team and community-driven approaches.

Conclusion: Effective health care services for people marginalized by social and systemic inequities and living with HIV must be responsive to the historical, political and socio-economic contexts of people’s lives.

Presenting author email: koushambhi.khan@nursing.ubc.ca

WEPE0772
With a little help from my friends: demand for membership of HIV/AIDS support groups among public sector ART clients in Free State province, South Africa

F. Booysen1, D. de Walque2, A. Bhargava3, M. Over4
1University of the Free State, Economics / CHRS&D, Bloemfontein, South Africa, 2The World Bank, Development Economics Research Group (DECRG), Washington, DC, United States, 3University of Houston, Economics, Houston, United States, 4Center for Global Development, Washington, DC, United States

Background: Sustainable ART programmes require an integrated, multi-faceted response aimed at ensuring long-term adherence to a lifelong treatment. Support groups present a potentially important source of adherence and psychosocial support to ART clients. This paper explores the demand, access and willingness-to-pay (WTP) for support group membership among ART clients enrolled in South Africa’s public sector treatment programme in Free State province.

Methods: In 2007/08, 648 adults who recently initiated ART were recruited into the Effective Aids Treatment and Support in the Free State (FEATS) study [ethical approval ETOVS 145/07]. At baseline, trained enumerators conducted structured, face-to-face interviews with patients after having obtained their written informed consent. Descriptive statistics and regression models are used to investigate aspects of demand, access and WTP to belong to HIV/AIDS support groups.

Results: There is a great need for (68%) but low levels of access to (2.6%) community-based support groups. Current groups are mainly organised by clinic staff and meet at least once a month at the health facility. These groups comprised ART clients, non-treated HIV-positive individuals and known HIV-negative persons. Current group members reported that they participate in various prevention and awareness activities in their community. Half of ART clients expressing a need to belong to a support group are also willing to pay, with WTP approximating USD3/visit. Demand for group membership is significantly greater among single clients, the non-disclosed, those exhibiting supportive coping, the less healthy, and previous support group members. Access to a support group is significantly higher among clients with partners and clients not exhibiting avoidant coping. WTP is significantly associated with greater education, less stigma, symptoms of depression, and longer treatment duration.

Conclusions: The results hint at the potential role of community-based support groups as means of psycho-social support and adherence support for patients, positive prevention among infected persons and community-wide HIV prevention efforts.

Presenting author email: booysenf.ekw@ufs.ac.za
WEPE0773
A model for transforming condom social marketing into a long-term, self-sustainable investment in Romanian HIV programs
D. Gavrilcescu, P. Mihacescu
PSI Romania, Top Management, Bucharest, Romania

Issues: Romania has a concentrated HIV epidemic among key populations at risk and who were infected via blood transfusions in the 1990s. The government offers little support to the affected segments and Romania lost international donor funding of such activities when it joined the European Union in 2007. In response, PSI/Romania is developing a social enterprise model to ensure long term organizational sustainability and funding for HIV prevention.

Description: PSI/Romania has implemented sexual and reproductive health programs since 1998. In 2008-2009, PSI invested $2.5 million to transform its condom social marketing program into a revenue stream funding for HIV prevention and reproductive health programs. Strong commercial competition, an economic downturn, and organization structural issues presented challenges during this transition. However, PSI/Romania’s condom distribution activities have achieved full cost recovery and generate revenue that partially covers marketing and administrative costs.

Lessons learned: Condoms operations are now a purely for-profit commercial endeavor. Positive financial results were first seen from September through November 2009. This transition provided valuable lessons. First, very different skills are needed to run a for-profit venture than a non-profit health organization. PSI/Romania changed 90% of key operations staff within 2 years. Second, pressure to deliver financial results showed inefficiencies and forced cuts in costs, including small cuts that led to impressive financial gains. The new venture also required tighter forecasting, cost control and cash flow management. Finally, continuous product innovations and brand marketing investments are required to stay competitive.

Next steps: PSI/Romania has a conservative plan to break-even with $1.3 million revenue in 2010. This is possible with intensified cost and cash-flow management, introduction of new product variants, development of staff business management and opening of new distribution channels. The result will be a self-sustainable organization with an internal funding stream for HIV priorities in Romania.

Presenting author email: pmihacescu@psi.ro

WEPE0774
Compulsory health information sessions coupled with wellness testing and proactive follow up results in high VCT uptake and increased DMP uptake at higher CD4 counts.

WEPE0775
Assessing role of community and decentralized care in mitigating ART patient attrition: case of St. Monica Mission Hospital, Kisumu, Kenya.
A. Nakhanu Wambanda
Catholic Relief Services - Kenya, Aidsrelief, Nairobi, Kenya

Issues: Since 2004, St. Monica Hospital (SMH) has been supported by AIDS Relief Kenya to implement ART services. In 2005, we were the main ART providers in the region. Upon rapid scale up of ART enrollment we noted many patients were travelling considerable distances to access the ART services lacking in their home area. Over three years, we noted a number of patients started defaulting care despite strong follow up activities by community health volunteers (CHVs).

Description: An ART program impact assessment, conducted in November 2008, included analysis of reasons for defaulting. A total of 82 files from defaulters of the preceding three months were sampled and analyzed. Trained CHVs and Community Health Staff traced these defaulters to verify data documentation. Reasons for Defaulting ARTA majority of default patients transferred to other facilities without notification. Official transfer of these patients contributed to a drastic drop in lost-to-follow up in quarter 1 of 2009.

Lessons learned: Despite interventions designed to prepare and support patients for long term treatment, socio economic factors weighed heavily upon treatment access. Additionally, activation of decentralized satellite clinics, offering ART services closer to patient residences, further reduced defaulters significantly.

Next steps: Future ART program plans include strict adherence to limited catchment enrollment area and standard operating procedures for document transferred patients. These findings shall be shared with other implementing partners as we advocate for additional support services in the area.

WEPE0776
Including the supply chain in a workplace HIV/AIDS program: lessons from the Levi Strauss & Co. experience
J.J. Hernandez1, D. Lee1, B. Palmer1, L. Cross1

Issues: Many apparel factories are located in areas of high or rising HIV prevalence. Levi Strauss & Co. (“LS&Co.”) is working to extend its own workplace HIV/AIDS assessment and education tools with supply chain partners. Together with local NGOs, LS&Co. and suppliers, HIV/AIDS knowledge and workplace issues are assessed among supply chain employees.

Description: The assessment includes a survey on HIV/AIDS and strives to capture information on knowledge, access to services, stigma and discrimination in the workplace. Surveys are executed by local NGOs alongside supplier management. Upon completion, suppliers are encouraged to use educational tools in their businesses (adapted from the LS&Co. workplace program) to demonstrate greater involvement and commitment to employee HIV-related issues, especially related to stigma and discrimination. LS&Co. is working with vendors in Mexico, South Africa, and Lesotho that provide manufacturing and distribution services to LS&Co.

Lessons learned: Encouraging the supply chain to support its employees on HIV/AIDS-related issues and introduce practices to reflect that support is an effective means of broadening the reach of HIV/AIDS workplace activities. A cross-functional team helped to identify each partner in the supply chain with demonstrated interests in the effort. Through collaboration and guidance, supply chain partners are able to learn from LS&Co.'s experiences in addressing HIV/AIDS issues with their employees.

Next steps: Recommendations to encourage collaboration with the private sector and supply chain on HIV/AIDS activities include:
- Integration of HIV/AIDS issues as part of overall strategy in the workplace with supply chain partners is essential
- Define clear goals and process to achieve those goals
- Encourage collaboration of brand, suppliers and NGO at the outset to introduce terms of partnership and set mutual expectations
- Share best practices to facilitate development of effective HIV/AIDS workplace activities
- Establish frequent communication among partners
- Obtain support from upper management among partners.

Presenting author email: delee@levi.com

WEPE0777
HIV test and disease management uptake with a comprehensive wellness program and compulsory health information sessions coupled with wellness testing and proactive follow up results in HIV knowledge status and increased DMP uptake. Management, unions and health insurers.
A. Manyike1, P.T. Manyike2, T.J.P. Tucker3
1Kisumu, Kenya, 2Kisumu, Kenya, 3Levi Strauss Foundation, San Francisco, United States

Issues: Since 2004, St. Monica Hospital (SMH) has been supported by AID-Relief Kenya to implement ART services. Since 2004, St. Monica Hospital (SMH) has been supported by AID-Relief Kenya to implement ART services. Since 2004, St. Monica Hospital (SMH) has been supported by AID-Relief Kenya to implement ART services. A cross-functional team helped to identify each partner in the supply chain with demonstrated interests in the effort. Through collaboration and guidance, supply chain partners are able to learn from LS&Co.'s experiences in addressing HIV/AIDS issues with their employees.

Next steps: Recommendations to encourage collaboration with the private sector and supply chain on HIV/AIDS activities include:
- Integration of HIV/AIDS issues as part of overall strategy in the workplace with supply chain partners is essential
- Define clear goals and process to achieve those goals
- Encourage collaboration of brand, suppliers and NGO at the outset to introduce terms of partnership and set mutual expectations
- Share best practices to facilitate development of effective HIV/AIDS workplace activities
- Establish frequent communication among partners
- Obtain support from upper management among partners.

Presenting author email: delee@levi.com
WEPE0777
An HIV/AIDS private sector programme in the workplace with the Guinean Chamber of Mines (CMG) in collaboration with GTZ and Partners Against AIDS (PAAA)
C. Diallo1, A. Komé Arawo2, L. Aventin2
1Chambre des Mines de Guinée (CMG), Conakry, Guinea, 2GTZ, Conakry, Guinea, 3Partenaires Contre le Sida, Poubelle, France

Issues: The Chamber of Mines of Guinea (CMG) is a professional association created by_and staffed by_ mine workers. CMG members employ 13 400 workers and take care of 130 000 potential beneficiaries. CMG, GTZ and PAAA decided to reinforce CMG capacities to provide care against HIV/AIDS to workers, freelancers and communities on four production sites.

Description: CMG offers the ability to increase the universal access to ARVs because of its private health care centers, hospitals and of its geographical situation all over Guinea.

Results: Over January 2009-2011, in collaboration with GTZ and PAAA, CMG invested around 870 000 Us$ in an action plan built on the training of 280 pair educators, 40 medicals and paramedicals and CCC campaigns to its employees and beneficiaries. The project started in October 2009; the main results are:
- 40 medicals staffs are trained in ARV care management
- ARV therapy is now available on 4 sites
- 170 workers are covered in several sites
- An administrative assistant is being recruited

Despite the political instability in Guinea and the current unavailability of ARV in most of the public health structures, the CMG and its partners started the project. The setting-up of a project cell in charge of managing the interventions to protect and transfer of competences from technical partners and planned. By march 2011, 625 PLHIV will be covered with ARV therapy.

Conclusion: The project started with 4 sites and was extended to an additional one. Finally, it will also encourage other sites (11 all over the country) to start ARV therapy. CMG and its partners already trained internal medical trainees in all sites. Recruitment of CMG cell in charge of the project should boost the project by march 2011.

WEPE0778
Promoting proactive partnerships for HIV prevention with factories in Central Honduras to ensure rights and services for young migrant workers
L.G. qvon Vuuren1, R.D. Romero2
1Musicos Internationaux, Portland, United States, 2Proyecto Aldea Global, Juventud Con Vision, Tegucigalpa, Honduras

Issues: Higher HIV prevalence in the southern region of North central Honduras fueled by a concentration of factories attracting young workers. Low awareness, stigma and denial feed prevention and result in poor uptake of testing and prevention services. Young workers are away from homes and villages, living in hostels. Factory owners are reluctant to address the problem due to lack of understanding of HIV transmission and fear of client reaction.

Description: Through determination, patience and a relational professional approach, Juventud Con Vision (JVC) has won the trust and confidence of local factory owners and management, forging a proactive partnership to reduce new HIV infections in at-risk youth working in their factories. The program includes working at all levels with factory owners, managers and workers, and collaborates with MOH and NGO service providers to confidential testing services and promote social justice and the legal rights of PLHIV. The program has increased availability and uptake of prevention and testing services and promotes fairness and transparency between HIV-positives or at-risk workers and their employers. Factories have used JVC curricula for HIV education and have incorporated HIV training and prevention and treatment services for employees into their operational plans.

Lessons learned: Reduce negative attitudes of employers through understanding their concerns and building trust. Engage business leaders and convince factory owners of the financial benefits of testing and prevention programs. Build momentum to include the majority of factory owners in the area and their workers to promote solidarity, reduce stigma and prevent negative repercussions in the retail markets. Address other issues such as low self-esteem, alcoholism, drug addiction, and domestic violence among factory employees.

Next steps: Document model to replicate to other factories, expand program to other regions with similar needs, demographics and risk factors.

WEPE0779
Private sector involvement in health strengthening through line-appropriate and cost-effective private sector buy-in for workplace HIV/AIDS prevention programs
S. Simons, S. Nakanyika-Mahoney
DAI, Lusaka, Zambia

Issues: In Zambia, the USAID Market Access, Trade and Enabling Policies Program (MAP) identified HIV/AIDS as a major constraint to competitiveness and growth in export industries. With funding from PEPFAR to develop workplace prevention programs, MATEP is concretely linking economic strengthening with health strategy.

Description: MATEP directly links economic strengthening activities with a health strategy by delivering HIV/AIDS “A/B” prevention messages to private sector clients—a niche previously unmet by Zambian service providers. Private companies are generally view HIV/AIDS activities as valuable investments. However, MATEP stimulated private sector demand for prevention programs by highlighting the clear financial impact of worker sickness, absenteeism and turnover. MATEP-designed prevention programs reach employees with minimal workplace disruption. In four years, MATEP delivered prevention messages to approximately 70,000 individuals, of which 40,043 were women. Over 1,500 workers were trained to deliver workplace HIV/AIDS prevention messages at each factory. In addition, MATEP designed custom prevention messages for each industry, considering on-the-job risk for exposure, and coordinates with business associations to extend reach beyond large firms to small and medium size enterprises.

Lessons learned: Effective workplace HIV/AIDS prevention programs understand businesses needs. In addition to MATEPs peer educator-led prevention activities, beneficiaries want access to condoms, voluntary testing and counseling, and Anti Retroviral Treatments. MATEP provides service referrals, but successful scale-up should include demand-driven testing, care, and treatment interventions. Local ownership is increased by working through business associations and training employees for implementation within their companies. Businesses have embraced prevention activities, but due to plentiful donor funding are not incentivized to contribute resources beyond labor hours.

Next steps: MATEP is working with the Zambia Council of Small and Medium Business Associations (ZCSMBA) and district business associations to develop a robust outreach program for delivering HIV/AIDS prevention messages to hundreds of thousands of rural Zambians.

Presenting author email: scott_simons@dai.com

WEPE0781
Cutting the cloth to fit the organization: beyond “parliamentary” assessment and strategic planning for civil society organizations working in the field of HIV
M. Huff-Rousseille1, A. Bahl2, B. Sheppard3, E. Bentun4, F. Sala-Dakanda5
1Social Sectors Development Strategies, Inc, Boston, United States, 2Social Sectors Development Strategies, Inc, Abidjan, Cote d’Ivoire

Issues: Social justice calls for righting the power imbalance between “developers” and indigenous civil society organizations (CSO) being “developed” with foreign aid. In the HIV/AIDS field, so-called “parliamentary” approaches to strategic planning with CSOs often give them organizational development assessment scales which they are allowed to read or interpret, and then ask the CSOs to put themselves into pigeonholes corresponding to pre-established criteria. This approach may be appropriate for “mechanistic” organizations with established quality standards, such as a clinical service or a McDonald’s. However, many CSOs working on HIV prevention and services operate non-mechanistic program models that aim for changes in socio-cultural norms and behavior, and that operate in a complex, politically contentious environment. These CSOs need a tailorable approach.

Description: Based on a series of workshops with 10 PEPFAR-funded CSOs in Côte d’Ivoire (youth associations, women’s community-based, and national CSO networks), the authors describe a self-assessment and strategic planning process designed to allow maximum control and ownership by indigenous CSOs, and how that process led to different kinds of plans and evaluation frameworks. The process, which is adjusted to fit each NGO, uses Gareth Morgan’s “Images of Organization” metaphorical approach, as well as tested analytical frameworks and political/stakeholder mapping to facilitate a rigorous self-analysis of everything from current goals to internal operating systems and external trends in the environment.

Lessons learned: The resulting strategies and ways of “measuring” progress are tailored for and rooted in each CSO’s “administrative will.” The
WEPE0782
Aastha experiences of public - private partnerships in provision of HIV testing services in Mumbai, India
A.S. Bhende, S. Gupta, V. Ranebennur, S. Gaikwad
Family Health International, Aastha, Mumbai, India

Issues: The 2007 HIV Sentinel Surveillance showed that Sex Workers (SWs) in Mumbai have an HIV prevalence ranging from 8.4% to 42.4%, depending on their typology. Knowledge of HIV status is important for the individual and planning of programs. However, resource constraints, odd working hours, long distances and fear of stigma, make it difficult for SWs to access services from STI clinics to Government Integrated Counseling and Testing Centres (ICTCs) difficult, resulting in low testing rates.

Description: Aastha is implementing Aastha, a Bill & Melinda Gates Foundation supported HIV/STI prevention project for 30,000 male, female and transgenders in Mumbai every month. In March 2009, Aastha entered into an agreement with the Government to set up 15 ICTCs under a public-private partnership (PPP) scheme; making this the largest PPP model in the country. Aastha utilized the ICTCs as a platform to take the project infrastructure investments, including its sensitized personnel. C&T related training; testing kits and quality assurance were provided by the Government. This led to optimum utilization of resources with no additional budgetary implications. Since the initiation of ICTC services, an almost nine fold increase of monthly HIV testing was seen, from 111 SWs tested in February 2007 to 977 SWs in November 2009. Of the SWs accessing ICTC services, an increase in testing was seen from 1.2% in February to 9.9% in November 2009.

Lessons learned: Accessibility and a conducive environment are essential to increase the uptake of HIV testing services amongst SWs and PPP models can effectively increase service reach in a cost-effective manner.

Next steps: The Aastha model of integration of HIV testing with STI services through public-private partnerships can be replicated in HIV prevention programs in concentrated HIV epidemic settings to increase access and uptake of HIV testing services among most-at-risk populations.

Presenting author email: abhende@fiindia.org

WEPE0783
Answering the call: addressing Botswana to address long-term technical capacity shortages for HIV/AIDS through public-private partnership
P.M. Stegman1, T. Moeti2, G. Musak1, I. Chingombel2, L. Busang2
1UNAIDS Coordination Agency, Gabarone, Botswana, 2African Comprehensive HIV/AIDS Partnerships, Gabarone, Botswana

Issues: In the late 1990s, Botswana faced many challenges. It was one of the countries worst affected by HIV and AIDS, and had been classified as a middle-income country. This latter fact severely limited Botswana’s ability to absorb many of the posts created and maximize its strengthened technical capacity.

Description: Answering the call: assisting Botswana to address long-term technical capacity shortages for HIV/AIDS through public-private partnership.

Next steps: Capacity development strategies with indigenous CSOs working in the areas of health (UNAIDS and the World Food Programme) constitute the program core which unites more than 60 local partners who interact across 12 African countries.

Presenting author email: psjegman@gov.bw

WEPE0784
The power of small: new generation PPPs expand reach without sacrificing focus
R. Lands}, L. Disney
‘UN World Food Programme / North Star Alliance, Rome, Italy, ‘North Star Alliance, Utrecht, Netherlands

Issues: When delivering services to fill healthcare gaps, big isn’t always better. Overarching public health crises like HIV and TB are everyone’s problem and nobody’s responsibility. Large scale strategies can fail if they are just public-private partnerships but shut out local actors who are better placed, more knowledgeable and have more to gain from succeeding. Smaller more fluid partnerships expand health services without losing focus.

Description: Partner clusters are used to support a network of roadside wellness centres that extend the reach of national health systems to highly mobile men and at-risk women. North Star Alliance’s innovative business model leverages donor funds and local financial and in-kind support for sustainability. The composition of each partner cluster depends on national capacity, local business and technical expertise. The low-cost health delivery platform offers long-distance truck drivers, port workers and sex workers primary health care, HIV/STI prevention, STI treatment, management of chronic conditions (hypertension, diabetes), treatment of malaria and common ailments (eye strain, upper respiratory infections), TB screening, behaviour change communication and medical referrals. An advanced ICT system tracks client usage and transforms program data from each cluster into a comprehensive regional picture. The International Transport Workers’ Federation (ITF), ORTEC, TNT, UNAIDS and the World Food Programme constitute the program core which unites more than 60 local partners who interact across 12 African countries.

Focused operations research is improving services for women and girls and testing mobile telephony for peer education.

Lessons learned: Small and medium enterprises get shut out of large PPPs but a cluster approach can harness their knowledge and energy.

Next steps: More focused approach to identify and combine partner clusters to increase infrastructural coverage and move outside of Africa.

Presenting author email: luke@northstar-alliance.org

WEPE0785
Youth and prevention: a partnership experience among the Ministry of Health (MS), the Ministry of Tourism (MT) and the Brazilian Youth Hostel Federation (FBAJ)
V. Costo, C. Oliveira, R. Burgos
Brazilian Ministry of Health, STD, AIDS and Hepatitis Department, Brasilia, Brazil

Issues: Data on AIDS in Brazil indicates that the epidemic is intensifying in the youthful population especially among girls in the 13 to 19 age group through heterosexual transmission and boys of the same age through homo/bisexual exposure. This poses a challenge to find new spaces for prevention among young people. To promote the access of young people to condoms and accurate prevention information the Ministry of Health’s STD, AIDS and Viral Hepatitis Department established a partnership agreement with the Ministry of Tourism and the Brazilian Youth Hostel Federation.

Description: Informativo material on STD/AIDS prevention was produced in Portuguese/English and Portuguese/Spanish suitable for a target public of young people as well as promotional material to be displayed in Youth Hostels. The Hostels distribute condoms thereby facilitating access to that commodity. To boost the efficacy of the actions a training meeting was held to familiarize youth hostel managers and personnel and enable them to deal with the associated prevention content and information. Of the 95 Brazilian youth hostels affiliated to the FBAJ, 59 have adhered to this initiative. The strategy was announced jointly by the MS, MT and FBAJ at the Saíde ao Turismo, tourism fair run by the MT, an excellent channel of communication with Brazilian tourism destinations that ensured widespread circulation of prevention information in an interpersonal space.

Lessons learned: The collaboration of institutions outside the health field is fundamental to ensure capacity of prevention actions and to provide access to information and condoms in spaces where the target publics circulate.

Next steps: Monitoring the actions through the Federation’s own Quality Programme and continuing training activities to qualify the approaches made in the hostels.

Presenting author email: vania.costa@aids.gov.br

WEPE0786
Prevention through partnership: fighting HIV/AIDS in Bangladesh
M.M. Rahman, N.U. Ahmed, D.S. Khan
Save the Children USA, Bangladesh Country Office, HIV/AIDS Sector, Dhaka, Bangladesh

Issues: Implementation of HIV/AIDS Prevention program through Public-Private Partnership (PPP) in a developing country.

Description: With the aim to keep the current low HIV prevalence rate (~1%), the Govt. of Bangladesh has developed collaborative partnership with Save the Children USA for efficient management of Grameen Shakti District Round 2 and Round 6 HIV/AIDS programs. Following the Public-Private Partnership approach in program selection, implementation, 13 consortiums were selected that consists of 62 NGOs (national & international) partners including corpo-
WEPE0789
How much does business really bring to HIV response? Quantifying in-kind and financial contributions of the private sector

J. Laporte1, Z. Soomar2, O. Doherty2, K. Amekudzi2

1International Labour Organization, ILO Programme on HIV/AIDS and the Work of World, Geneva, Switzerland; 2International Labour Organization, Geneva, Switzerland

Description: The International Labour Organization SHARE Programme (Strategic HIV/AIDS Responses in Enterprises) worked with about 700 enterprises in 24 countries and helped them to: • appoint and support an HIV/AIDS focal point, • develop and implement an HIV/AIDS, policy and programme, and • allow educators or conduct education during working hours. SHARE built capacity by training the focal point, the committee and the peer educators. Technical support was provided for the development of the policy, programme, and including a limited number of tailor-made communication materials. The activities took up employees’ working time and used such enterprise facilities as conference rooms and resource materials. These inputs are not easy to quantify and SHARE developed a questionnaire for a selection of partner enterprises to capture their contributions.

Lessons learned: Preliminary findings show that the in-kind and financial contributions made by the partner enterprises in most cases equal the funding required to ensure capacity building and provide technical assistance. What is more, the buy-in by the enterprise reduces dependency on outside funds and helps ensure sustainability.

Next steps: The questionnaire and survey findings will be disseminated as a tool to support enterprises to document their contribution to the AIDS response as a basis for advocacy, resource mobilization and improved planning.

Presenting author email: laporte@ilo.org

WEPE0787
Early and extensive targeted interventions result in sustained reduced HIV prevalence in Kerala state, India

S. Koman1, K. Shyajala1, T. Velayudhan1, D. Joseph1

1Technical Support Unit for KSACS, Kerala State AIDS Control Society, Trivandum, India, 2KSACS, Kerala State AIDS Control Society, Trivandum, India

Issues: Kerala (population 32million) is situated in south India, where the epidemic is most severe. Kerala was identified in 1994 as a potential region for rapid HIV spread because of the massive outmigration for work due to poor economic development, coupled with a well educated labour force. In addition, recently there has been considerable in-migration of manual labourers from other states, which pose new challenges.

Description: In 1997, a management structure was set up with OFDII support and interventions targeting FSWs and their clients, MSMs, prisoners, transport workers and other risk groups were put in place. Strong public-private partnerships were established with more than 50 NGOs, and more than 150,000 at risk population was covered through interventions by 2003. Mapping in Kerala has revealed the presence of more than 50,000 FSWs, and 30,000 very active MSM and pockets of injecting drug users. Currently 74% of FSWs, 88% of MSM and 81% of IDUs in the state are addressed by these interventions, for which technical expertise is provided by USAID. HIV prevalence of 3.8% among FSWs in 1999 has decreased significantly to only 0.87% in 2007. The HIV prevalence among MSMs is currently 0.96%. The HIV prevalence among intervention FSW centres is only 0.1%. The adult HIV prevalence is 0.26%. The only exception is among the 3000 current IDUs, in which the HIV prevalence is 7.7%. Interventions among this group have been strengthened.

Lessons learned: Early and widespread institution of well designed program interventions targeted at core population groups that are at risk, have resulted in sustained reduction of HIV levels among the core populations as well as the general public.

Next steps: The management and ownership of targeted interventions are being transferred to community based organizations (CBOs) of at risk populations for enhancing coverage and ensuring sustainability.

Presenting author email: manuelprasadnakumar@gmail.com

WEPE0788
Successful collaboration of positive people networks and government ART centers in minimizing default and maximizing adherence: experience from Orissa, India

P. Bhattachar1, P. Rath2, S. Tripathy3, P. Gomathy1

1Indian Network for People Living with HIV/AIDS, Chennai, India; 2Indian Network for People Living with HIV/AIDS (INP+), Bhuvneshwar, India; 3Concern, India, Bhavaneshwar, India

Issues: In Orissa, 2 ART centers were providing free ART to PLHIV by the government. One of the major problems is increased default in ART roll-out, factors known to HIV/AIDS accessibility to care are limited number of ART rollouts, undesirable health management information system and health care delivery system, lack of resources and poor transportation facility. The major concerns at ART roll-out are personal risk assessment and health-seeking behaviour. The findings also showed inadequacies in internal coordination, desk and referral. The effectiveness of some programme components (e.g. peer education) would require review in view of high staff turnover.

Next steps: The integrated HIV/AIDS care and treatment program is being worked together under enterprise information system to track the defaulters in the target areas. The DRA’s role is very important from the ART centers perspective with the defaulter’s list is prepared by ART counselors and further follow-up are done by the DRA along with the consent from the District Level Network. The main challenge faced by the DRA is confidentiality and identity issues. Nearly 75% default cases have been mainstreamed with the regular ART adherence by the clinical efforts of District Level networks.

Lessons learned: The main success for tracking default clients is collaboration with Government and public positive networks. The collaboration which paves new dimension with public private partnership and ensures effective implementation of the program.

Next steps: ART default tracking enabled documenting the process and sharing the best practices at the national level. The should have further discussions with stakeholders by sharing the experiences and motivating them to implementing the successful default tracking system in all other countries.

Presenting author email: phbutharya76@gmail.com

WEPE0790
Integrated approach improves HIV prevention and reproductive and health outcomes among young female garment factory workers in Cambodia

P.M. Campbell1, U. Gilbert1, K. Gesa2

1UNICEF, HIV Programme, Phnom Penh, Cambodia; 2Independent Consultant, Phnom Penh, Cambodia

Description: The International Labour Organization SHARE Programme (Strategic HIV/AIDS Responses in Enterprises) worked with about 700 enterprises in 24 countries and helped them to: • appoint and support an HIV/AIDS focal point, • develop and implement an HIV/AIDS, policy and programme, and • allow educators or conduct education during working hours. SHARE built capacity by training the focal point, the committee and the peer educators. Technical support was provided for the development of the policy, programme, and including a limited number of tailor-made communication materials. The activities took up employees’ working time and used such enterprise facilities as conference rooms and resource materials. These inputs are not easy to quantify and SHARE developed a questionnaire for a selection of partner enterprises to capture their contributions.

Lessons learned: Preliminary findings show that the in-kind and financial contributions made by the partner enterprises in most cases equal the funding required to ensure capacity building and provide technical assistance. What is more, the buy-in by the enterprise reduces dependency on outside funds and helps ensure sustainability.

Next steps: The questionnaire and survey findings will be disseminated as a tool to support enterprises to document their contribution to the AIDS response as a basis for advocacy, resource mobilization and improved planning.

Presenting author email: pcampbell@unicef.org

Abstract Book Volume 2 | www.aids2010.org
WEPE0791
Scaling up of PMTCT services in the private sector through public-private partnership
Goal: To provide guidelines for states with limited resources.
Description: PMTCT services in India are limited. There is no standard guidelines for states with limited resources. The objective of this project is to develop comprehensive guidelines.
Lessons learned: The project was successful in developing comprehensive guidelines.
WEPE0792
Need of intermediaries in successful implementation HIV/AIDS programs in the private sector towards saturated coverage of pregnant women with HIV testing
C. Chatla1, R. Bandi1, J.R. Palakuru1, N. Yarramaddu1
Andhra Pradesh State AIDS Control Society, Hyderabad, India
Issues: There is sizeable proportion of the pregnant women in the state of Andhra Pradesh (AP) deprived of HIV testing as per the National Testing Protocols (NTP). AP is one of the high prevalent states in India with well established private sector. Intermediaries between government and private sector would help in targeting the ANC coverage.
Description: AP had estimated 1,760,804 pregnant women in 2008 and 1,788,354 in 2009 as per census 2001 with more than 80% institutional deliveries.
Lessons learned: In 2009, while involving private sector, AP had estimated 46-50% of the ANC found attending private clinics for their routine ANC and increasing incidences of STIs such as Gonorrhea, Syphilis and Hepatitis B.
WEPE0793
Public-private partnership for sustaining HIV care and treatment programs in rural Tanzania
J. Zeleke1, A. Cunningham1, R. Kalumna1, B. Kassambala1, J. Chintowa1, C. Henjewe1, M. Strachan1, R. Mbata1
1International Centre for AIDS Care and Treatment Programs, Dar es Salaam, Tanzania, United Republic of; "Kagera Sugar Company, Bukoba, Tanzania, United Republic of;
2International Center for AIDS Care and Treatment Programs, Malamain School of Public Health, Columbia University, USA
Issues: Sustaining ART services is an increasing challenge as global public health funds are stretched to meet needs. Partnerships between HIV service providers and private sector to provide HIV prevention and care/treatment to employees and surrounding communities can contribute to comprehensive, sustainable HIV services.
Description: The International Center for AIDS Care and Treatment Programs, Malamain School of Public Health, Columbia University, supports HIV prevention, care and treatment services in 13 countries in Sub-Saharan Africa. In 2006, ICAP Tanzania (ICAP-TZ) with funding from US Centers for Disease Control and Prevention began supporting the expansion of HIV care and treatment services in Kagera region to hospitals and faith based centers, with expansion to selected primary health centers. In 2007 ICAP-TZ identified Kagera Sugar Company for a public-private partnership with Kagera Sugar Company (KSC) in Misenyi District (catchment 181,000; 5.9% HIV prevalence) is a private Tanzanian company employing up to 5,800 employees. ICAP-TZ with KSC launched a PPF to initiate ART treatment to employees, families and the surrounding community. ICAP-TZ provides training, start-up and ongoing technical support, laboratory equipment, clinic renovation and introduction of new HIV related programs. KSC provides infrastructure, OI drugs, staff and recurrent costs. The Government of Tanzania provides ARVs.
Lessons learned: Prior to this partnership, KSC did not offer ART services, the ART program had been introduced in 2007. KSC had established 497 clients into HIV care, with 208 cumulatively on treatment; 62% women, more than 50% of the clients from outside the company. ICAP-TZ trained 18 health care workers and successfully introduced PMTCT, TB/HIV integration, provider-initiated testing and counseling, and HIV prevention programs to the facility. KSC also employs four PLHIV peer educators.
Next steps: PPFs are possible at smaller private sector companies in Africa, and promote corporate responsibility for supporting ARV services long term.
Presenting author email: jr2346@columbia.edu
WEPE0794
Working with established bar owners and organizations linked with freelance prostituted women on the prevention of STIs, HIV and AIDS
A. Umali1, A. Tamayo2
1United Nations Population Fund, Muntinlupa City, Philippines, 2City Health Office, Olongapo City, Philippines
Issues: STIs and HIV have a significant impact on the health status of the target population. These women are often at risk for STIs and HIV.
Description: This study was conducted to determine the need for interventions that would address the health needs of freelance prostituted women in the city of Olongapo, Philippines.
Lessons learned: The study found that freelance prostituted women were at risk for STIs and HIV.
Next steps: The study recommended the need for interventions that would address the health needs of freelance prostituted women.
Informant: This study was conducted to determine the need for interventions that would address the health needs of freelance prostituted women in the city of Olongapo, Philippines.
WEPE0795
Improving HIV prevention among migrant workers in Thailand through the MOPH-IOM migrant health program implementation
R. Umap1, V. Drapaet2, R. Thato1, N. Iththai1
1Chulalongkorn University, Faculty of Nursing, Pathumwan, Thailand, 2IOM Thailand Mission, 18 Floor, Rajanakarn Building, South Sathorn Road, Sathorn, Thailand
Issues: Embedded migrant health services in the Thai Ministry of Public Health (MOPH) infrastructure and appointment of Migrant Health Workers (MHWs) as a key implementer help to improve health conditions and HIV/AIDS prevention among migrants in Thailand.
Description: Since 1999, the International Organization for Migration (IOM) and the Ministry of Public Health (MOPH) of Thailand have been working together to prevent HIV among migrants in Thailand. This collaboration has resulted in the establishment of the IOM-MOPH Migrant Health Program, which has implemented several interventions aimed at preventing HIV among migrants.
WEPE0796
Can private sector increase access to STI services of the most at risk population (MARP)? Evidence from Vietnam

M. Pham Duc, T. van der Velden, T. Nguyen Chien, A. Mai Hoang, B. Le Ngoc, H. Ngo Van
Pathfinder International, Hanoi, Viet Nam

Issues: Sexually transmitted infections (STI) increase the risk of HIV infection. Viet Nam are primarily female sex workers (FSW) and intravenous drug users (IDUs) who have limited access to STI services. Lack of knowledge and access to need for the STI/HIV services, financial constraints, stigma and discrimination are the main barriers to access.

Description: This project developed and piloted a government backed voucher scheme for MARPs to use STI services at 9 selected private clinics in 4 districts of An Giang province, Viet Nam. Pathfinder provided training for private providers, the provincial center for AIDS and TB control (PCT) distributed vouchers to MARPs through an existing peer educator network which allowed them access to services (counseling, examination and treatment) at assigned clinics. The district health centers collect, check used vouchers, make payments to providers and report to PCT.

Lessons learned: Some MARPs in Viet Nam are primarily FSWs and IDUs, who have limited access to STI services. The pilot faced challenges in reaching IDUs and possible risks of collusion between peer educators and providers to cash in the vouchers with no services having been rendered. Further steps: Further study on how to better reach the IDUs and to strengthen the monitoring system will be needed to improve effectiveness and efficiency of the pilot. The pilot’s results on a public-private partnership model to provide health services to hard-to-reach population will be further explored and discussed.

Presenting author email: nhvu@pathfind.org

WEPE0797
Engaging the private health sector in Nyanza province, Kenya to reach men with VMMC for HIV prevention: what will it take?

L. Duli1, M. Mboondo1, E. Keyer1, B. Boyeri1, R. Holman2
1Family Health International, Health Services Research, Nairobi, Kenya, 2Family Health International, Health Services Research, Durham, United States

Background: Achieving Kenya’s goal to reach 253,000 men ages 15-49 in Nyanza Province with the WHO recommended minimum package of voluntary medical male circumcision for HIV prevention (VMMC) by 2014 will require resources beyond the existing public health system. The private health care sector accounts for 47% of health facilities in Kenya, making them an obvious potential partner. Strategies to engage the private sector in this public health initiative will require ensuring they meet minimum quality and safety standards, and devising plans finance the services.

Methods: A cross-sectional survey of private health care facilities in Nyanza Province Kenya was conducted between January and March 2009. Data collection was with facility managers, providers, and structured facility observations. Descriptive statistics and cost estimates were calculated. Costs to meet minimum standards included infrastructure improvement, equipment and training. Costs to perform one MC were based on overhead, direct and indirect personnel, and supplies.

Results: Reaching clinics, health workers and primary hospitals were assessed (16 faith-based, 7 NGO and 16 for-profit) and 430 providers interviewed. Nearly all facilities offered some components of the WHO minimum package; 13 provided all components. However, none had undergone national training on VMMC. The average cost to bring private facilities up to minimum standards was US$1,451 (range $270-$3,680). The average cost to provide VMMC to one client was $68 (range $38-$173).

Conclusions: There is huge potential to leverage private sector providers to meet the backlog demand for VMMC services in Kenya; however this will require the commitment of private providers and/or other funders to invest substantial resources into infrastructure improvements, equipment and training. Cost-recovery strategies that are affordable to patients will need to be devised. Some possibilities include fee charging, contracting in, co-financing and other schemes.

Presenting author email: lduli@ghi.org

Faith-based HIV programmes WEPE0798-WEPE0803

WEPE0798
Understanding and designing HIV programmes with faith based organisations in St. Kitts and Nevis

R. Lal1, N. Kassie1, A. Naikaran1, J. Myers1, G. Bombereul-Mulot1, M. Thomas2, N. Persaud2, P. Williams3
1Caribbean HIV/AIDS Alliance, Eastern Caribbean Community Action Project, Port of Spain, Trinidad and Tobago, 2Caribbean HIV/AIDS Alliance, Eastern Caribbean Community Action Project, Basseterre, Saint Kitts and Nevis, 3University of California San Francisco (UCSF), San Francisco, United States

Background: There is an emphasis placed on faith based organisations (FBOs) in the HIV response within the St. Kitts and Nevis national strategic plan. However, there is little information on the role that FBOs can play regionally. This study therefore examined the willingness, capacity, barriers and potential of various FBOs to implement HIV programmes through faith based community strategies in this country.

Methods: A situational analysis was undertaken using a combination of qualitative and quantitative data collection methods. Methods included structured interviews with denominational representatives, church representatives across denominations and geographic areas within St. Kitts. Areas covered in data collection included relevant FBO doctrines and teachings, HIV current programming, interest in expanded programming and existing facilities and barriers.

Results: Some FBOs in St. Kitts are engaged in counselling and testing and services to PLHIV and PLWA on an informal and small-scale basis. FBOs are interested in expanding HIV related programmes. Over 9 months of the pilot, a total of 3,061 vouchers were issued.

Lessons learned: Lessons learned: FBOs are interested in expanding HIV related programmes. Some FBOs are interested in providing services to PLHIV and PLWA on an informal and small-scale basis. The pilot faced challenges in reaching IDUs and possible risks of collusion between peer educators and providers to cash in the vouchers with no services having been rendered. FBOs are interested in expanding HIV related programmes. Over 9 months of the pilot, a total of 3,061 vouchers were issued.

Presenting author email: brwilliams@alliancecarib.org.tt

WEPE0799
Innovative cultural approach in reducing vulnerability for ethnic women and children affected by HIV in the earthquake disaster areas of Sichuan, China

G. Wang1
1Sichuan Academy of Social Science, Centre for Cross-Cultural Studies in Sexual Health, Chengdu, China, 2School of Psychology, The University, Newcastle, Australia

Issues: The disastrous earthquake of 12 May, 2008 had its greatest impact on these women and children affected by HIV among ethnic minorities living in the mountainous regions of Sichuan at the earthquake’s epicentre. However, evidences have shown that employing traditional official-led model at the public health agenda from a non-indigenous and outside community perspective is a very limited effect in reducing vulnerabilities for these women and children affected in post-disaster of agency and challenged settings. The need for a comprehensive and sustainable for people in indigenous approach is stressed.

Description: The research project is the first program to use an integrated socio-cultural approach. This approach draws on successful experiences using indigenous responses to epidemics and vulnerabilities for HIV/AIDS in ethnic communities in earlier stages of China. Work carried out in this study related different stage with a cohesive and integrated approach to enhancing the ability of indigenous communities to respond to reliable response to disaster and epidemics across 3 ethnic counties of Sichuan. Stage one was conducted to assess the demands for 3450 children and 4360 current children’s female caregivers. Stage two was conducted to assure all the services for 3450 children and 4360 current children’s female caregivers. Stage one is used to tailor the evidence-based, culturally appropriate approach on the best use of integrated socio-cultural resources to facilitate the reduction of vulnerabilities and barriers. Evidences are extended used to support policy decision as well.

Lessons learned: Success in effective reducing vulnerabilities for these especially vulnerable ethnic people affected by HIV in disaster areas are largely attributable to indigenous cultural in relation to combating poverty and discrimination beyond a simple public health oriented approach. Gender and child-focused interventions is beneficial with the particular linking ethnic situation - traditional advocacy, empowering tribal/ethnic
society to take their own initiatives in collectivist environment is stressed to support decision-making in sharing successful experiences on the best use of health, wealth and cultural resources in post-disaster emergency and challenged settings cross-culturally.

Presenting author email: shugamp.wang@newcastle.edu.au

WEPE0800
Mobilizing faith based intuitions to take the lead in fighting HIV-related stigma and discrimination in Northern Uganda
R. Kanwagi, D. Sera, L. Cicci, J. Ojim
1National Institute of Medical Research, Gulu, Uganda

Issues: The active involvement of faith communities in HIV prevention and care has only emerged slowly during the last decade. Many Faith-based organizations (FBOs) still remain in the margins of national AIDS responses. This applies also in Uganda, where faith leaders were found to systematically promote negative attitudes towards infected individuals and inadequate knowledge and skills on this matter. Moreover, many religious communities find HIV-related issues challenging, particularly HIV prevention, as it touches on sensitive areas such as morality.

Description: NURAM included engagement of religious leaders in its prevention package through the following: involving them in advocacy against HIV-related stigma and discrimination; sensitizing them and their communities to understand the causes of HIV transmission and infection and factors increasing HIV vulnerability; promoting theological reflection on the HIV context stigma and discrimination; and encouraging influential faith leaders to speak openly about their own experiences regarding HIV.

Lessons learned: In 2009, 635 religious leaders were sensitized and guided in the formation of 267 congregational HIV/AIDS Task Teams. These task teams, with persons aged 5–6 people per congregation, are trained to plan and implement activities ranging from prevention among youth and couples, to homes and communities living with HIV/AIDS. Uptake of HIV counseling and testing was encouraged to enable mutual knowledge of HIV status among couples and disclosure to family members. As a result, 457 congregational members (F= 324 M= 133) were counseled and tested for HIV and 43 (9.4%) were HIV-positive.

Next steps: Local Faith based organizations have not institutionalized HIV related interventions and rely mainly on external financial and technical support, which many may not be sustainable in the long run. HIV prevention interventions by FBOs also need to engage men in addressing gender dynamics in regard to HIV prevention, violence against women and girls, treatment and care.

Presenting author email: jolim@nuramuganda.org

WEPE0801
Caring for the caregivers: understanding Rwandan OVC volunteers in a faith-based setting
D. Brewer-Leel, P. Manyingi, A. Clark
1Catholic Relief Services, Baltimore, United States, 2Catholic Relief Services, Kigali, Rwanda

Background: Catholic Relief Services (CRS)-Rwanda has been relying on volunteers, to reach orphans and vulnerable children (OVC) in their communities. CRS wanted to better understand the volunteer profile, their motivations and their relationship to the church.

Methods: 356 out of 320 OVC project volunteers completed a questionnaire. Supervisors completed another questionnaire ranking volunteers by performance: 29% of volunteers were ranked as high performers, 25% as low performers and 44% as medium performers.

Results: Volunteer demographics were 55% female and 45% male; 64% married, 36% single, and 13% widowed. 78% have completed primary school, 18% secondary school and 89% of the volunteers are farmers. Of all the volunteers, 22% are HIV-positive.

Conclusions: This faith-based program was associated with positive changes in knowledge, intentions to be mutually monogamous, and HIV testing. For example, HIV testing was significantly associated with increased intention to practice MM (AOR: 2.4; p< 0.05) and less likely to perceive practicing MM as difficult (AOR: 0.7; p< 0.05). Exposure was also significantly associated with increased intention to practice MM (AOR: 2.2; p< 0.005) and less likely to perceive increased resistance to MM (AOR: 0.7; p< 0.05) and increased likelihood to have tested for HIV in the last 6 months (AOR: 2.1; p< 0.005).

Next steps: This church-based program was associated with positive changes in knowledge, intentions to be mutually monogamous, and HIV testing. Programs should build the capacity of community church leaders to promote HIV prevention, including HIV testing.

Presenting author email: jotim@numatuganda.org

WEPE0803
Church leaders promoting partner reduction: an evaluation of an HIV prevention program in churches in the Eastern Cape, South Africa
W. Tung, N. Soba, N. Saladja, B. Gunjwala, E. Maroga, M. Qwabaza

Background: The South African HIV epidemic is fueled by the common practice of multiple concurrent sexual partnerships. The Eastern Cape Council of Churches and Population Council implemented and evaluated an intervention using church leaders to promote mutual monogamy (MM).

Methods: Church leaders (n=161) were trained in HIV prevention, HIV impact on families, gender equity, MM, and group facilitation skills. Church leaders facilitated workshops on these topics to fellow church members. Workshop participants were encouraged to consider challenges of MM specific to their community and were asked to develop a plan. Workshops were implemented in 40 churches over 15–17 months, reaching 2,792 church members through congregation-wide sermons and Bible study workshops. We assessed changes in knowledge, attitudes, intentions and practices around MM through baseline (n=437) and endpoint (n=382) surveys with congregants in 12 of the participating churches.

Results: Of the 382 endpoint congregants surveyed, one-half did not attend any workshops, 8% attended 1-2 workshops, and 41% attended 3-5 workshops (considered ‘exposed’). There were no differences in workshop attendance by gender. Exposed congregants had significantly greater HIV knowledge-edge of HIV prevention compared to baseline (76%) and those unexposed at endpoint (89% versus 76% and 79%; p< 0.05). In multivariate analysis, exposed congregants were more likely to have greater HIV prevention knowledge-edge (Adjusted Odds Ratio [AOR]: 2.2; p< 0.005) and less likely to perceive MM as difficult (AOR: 0.7; p< 0.05). Exposure was also significantly associated with increased intention to practice MM (AOR: 2.4; p< 0.05) and increased likelihood to have tested for HIV in the last 6 months (AOR: 2.1; p< 0.005).

Conclusions: This church-based program was associated with positive changes in knowledge, intentions to be mutually monogamous, and HIV testing. Programs should build the capacity of community church leaders to promote HIV prevention, including HIV testing.

Presenting author email: janeth@numatuganda.org

WEPE0804
Traditional healers and HIV programmes

WEPE0804
Promote and support traditional healers’ (THs) role in providing affordable, accessible, and culturally appropriate care to people living with HIV/AIDS (PLWHAs) in Migori district
Y. Sekaya
PROMETIA Uganda, Traditional Medicine, Kampala, Uganda

Issues: In Uganda about 940,000 PLWHAs. Out of Uganda’s total population 84% live in rural areas. Access to proper affordable health care becomes a challenge for those PLWHAs. The effect is that 1 million Ugandans have been but due to AIDS since 1983 and close to 1.2 million Ugandans have been orphaned. The issue becomes a need for affordable, accessible, and culturally appropriate health care for PLWHAs.

Description: In an attempt to provide affordable and accessible health care to rural Ugandans, PROMETIA Uganda has established programs for THs. THs meet every Wednesday in Buwala forest for three year training,
Whereby after passing exams, THs receive a certificate. A significant aspect of Buyijja Forest School is the full understanding of HIV/AIDS, its diagnosis, care, and management of the health of those infected or affected by HIV/AIDS. The hope is that all trainees who enter Buyijja Forest School acquire this knowledge back to their rural settings to help manage and care for PLWHAs in an affordable and culturally appropriate manner. PRIMETRA Uganda also documents and promotes THs’ positive practices, provides continuous education and training, and herbal treatments to PLWHAs, as well as exposure to international conferences.

Lessons learned:
- Individuals train as THs, while still maintaining their profession as teachers, nurses, etc.
- Training THs allows appropriate and accessible care and management of HIV/AIDS to individuals in rural settings, as well as reducing stigma against PLWHAs.
- Documenting THs’ positive practices reduces the risk of harmful infections: Exchange visits and international conferences deepen THs’ knowledge about HIV/AIDS.

Next steps:
- Partner with other actors to establish a joint advocacy forum that encompasses traditional and Western medical practices.
- Clinician involvement in promotion of PMTCT for labor migrants.
- Expand THs’ training to other districts throughout Uganda.
- Original research for provider level barriers to PMTCT.

Presentation author email: ysekayga@gmail.com

WEPE0807
Effectiveness of short-term preventive interference concerning HIV/STD among labor migrants
M. Serrekou, R. Khamitova

"Autonomous Charitable Nonprofit Organization New Century, Kazan, Russian Federation, -Kazan State Medical University, Kazan, Russian Federation"

Premises: From 2007 to 2009 a project of HIV/STD prevention among labor migrants was carried out in several areas of the Russian Federation, including Kazan. It consisted of outreach-work, giving prophylactic information, making the access to medical service easier. The aim of this research is to determine the effectiveness of short-term preventive interference concerning HIV/STD among labor migrants.

Methods: We used the methods of standard interviewing of 200 male migrants at construction sites and places where they get permission to work in the city of Kazan. We carried out research for a two-year interval in February 2007 and April 2009.

Results: According to the results of this research, rendering medical service to labor migrants has become much better. In 2009 98% of migrants have access to medical services, whereas in 2007 this figure was equal to only 45%.

During the two years the percentage of HIV-examination increased from 68% in 2007 to 96% in 2009 and 100% of migrants underwent X-ray examination.

Now migrants have better knowledge about HIV infection. For example, in 2007 28% of respondents believed that it is possible to catch HIV through common dishes and 45% through a mosquito bite. In 2009 such incorrect answers were given by fewer respondents: 5% and 19% respectively.

The share of migrants who are certain that it is possible to diminish the risk of HIV infection by using condoms has increased significantly from 79% to 98% in 2009. There has been a tendency of decrease of risky sexual behavior: in 2009 34% of respondents used condoms during sexual contacts (in 2007-30%)

Conclusion: The present research shows the effectiveness of short-term (2-3 years) preventive programs among labor migrants. Preventive measures could be aimed at informing about HIV/STD and rendering medical services to labor migrants.

Presentation author email: lilita@yandex.ru

WEPE0808
Virological assessment of antiretroviral therapy (ART) failure at Lighthouse Trust: a retrospective review of the use of virological assessment forms (VAFs) and decisions to modify therapy
C.A. Vorkou1,2, H. Twya1, D. Mazinganjira1, G. Dickier, R. Weigel, S. Phiri, R. Hossenlopp1,4

1UNC Project, Fogarty Scholar, Lilongwe, Malawi, 2Well Cornell Medical College, Medical Student, New York, United States, 3Lighthouse Trust, Lilongwe, Malawi, 4UNC Project, Lilongwe, Malawi, 5University of North Carolina at Chapel Hill, Chapel Hill, United States

Background: Evaluating treatment failure is vital when deciding to modify ART. Virologic Assessment Forms (VAFs) have been used since 07/2008 as a prerequisite for ordering viral load. The form requires assessment of clinical/immunologic status or indication of other reasons for screening.

Methods: The using Electronic Medical record, we evaluated patients >15 years old who met WHO or Malawi guidelines for immunologic failure (CD4 count < 200 cells/μl) or ART failure (CD4<50% from peak, CD4<100 cells/μl at the Lighthouse Trust clinic from 1/2012 to 12/2009, when plasma HIV RNA assays were in use. We retrospectively reviewed VAF information for information concerning routine care and ART modification during the same period.

Results: Of 7,032 enrolled ART patients >15 years old with at least one CD4 count, 702 (10%) patients had immunologic failure for 65 (9%) viral loads were ordered. 28 (43%) were detectable and 16 (57%) were switched to an alternative or second-line therapy. Overall, 259 VAFs were completed. 193 (75%) of which were for immunologic failure, although errors in application of the guidelines, employment and inaccuracy. The remaining 66 VAFs were completed for other reasons, most commonly clinical deterioration. Before VAF

WEPE0806
Ensuring justice for PLHA: evaluating the integration of legal support in health care in Kenya
S. Gruzin1,2, R. Baad1, L. Ferguson3, J. Cohen1, T. Ezer1, A. Gathumbi1, P. Kamra-Moodie4

1Program on International Health and Human Rights, Department of Global Health, Boston University, Boston, United States, 2Open Society Institute, Public Health Program-Law and Health Initiative, New York, United States, 3Open Society Initiative for East Africa, Nairobi, Kenya, 4Strathmore University, Nairobi, Kenya

Background: People living with HIV/AIDS (PLHA) in Kenya continue to face stigma and discrimination that limit their access to HIV/AIDS services and pose challenges in areas including employment and inheritance. Integrating legal support into health services is a novel way to ensure power PLHA, increase access to justice, and address human rights violations underlying poor health. Little is known about how integration efforts systematically affect the protection of health and well-being of the health services. We conducted an evaluation of four NGO projects integrating legal care and human rights into PLHA and other vulnerable groups in Kenya.

Methods: Guided by a health and human rights analysis and with the aim of informing future programming, we used mixed methods to assess project impact on the health and rights of PLHA and on service provision. A conceptual logic model was developed in consultation with the NGOs. Semi-structured interviews and focus group discussions were conducted with staff and clients to explore: on-site legal service provision; legal and rights trainings for service providers and clients; referrals to legal and health-related services; information campaigns and advocacy. Client cases and referrals were tracked using routine data. Client satisfaction surveys and training assessments were also implemented.

Results: Preliminary findings indicate the projects have positively affected clients’ and service providers’ knowledge and awareness of rights; client use of and satisfaction with health and other services; client empowerment; referrals between services; and access to protection and redress mechanisms for rights violations.

Conclusions: This evaluation suggests that integrating legal services into health care is a valuable approach to support the health and human rights of PLHA and other vulnerable groups and the effective delivery of health and other services in resource-poor settings. Evaluating the impact of these efforts and sharing lessons is critical for scale-up and identifying best practices.

Presentation author email: razaad@hsph.harvard.edu

WEPE0805
Investigating factors hindering progress in the prevention of vertical HIV transmission in Soweto, South Africa
A. Cescos1, F. Laher1, E. Lazarus2, A. Kaidi3, M. Makongoza2

1Program on International Health and Human Rights, Department of Global Health, Boston University, Boston, United States, 2Kazan State Medical University, Kazan, Russian Federation, 3Kazan State Medical University, Kazan, Russian Federation

Background: The scale-up of South African public sector prevention of mother-to-child transmission (PMTCT) to a dual AZT/NVP regimen in 2008 led to significant reductions in vertical HIV transmission, yet incident pediatric infections continue. The objective of this study was to identify reasons for these incident cases in the era of free PMTCT access in South Africa.

Methods: This qualitative-quantitative study was conducted at the Perinatal HIV Research Unit in Soweto from June-August, 2009. Birthmothers of known HIV-infected infants born on or after December 1, 2008 were eligible. All participants completed an interviewer-administered questionnaire which collected information regarding demographics, obstetric history, antenatal care, HIV and CD4 testing, type/duration of PMTCT regimens for mother and infant, delivery, and feeding. Women also participated in a focus group (n=10) or semi-structured interview (n=35).

Results: Participants (n=45) had a mean age of 28.7 years (SD=5.4) and mean parity of 2.4 (SD=1.1). The mean gestational age of infants at birth was 8.5 months (SD=0.7) and mean birth weight 2.7 kg (SD=0.7). Thirty-eight mothers (84%) reported exclusive formula feeding, 1 (2%) exclusive breastfeeding, and 6 (13%) mixed-feeding. Through triangulation of quantitative and qualitative data, 28 mother-infant pairs (62%) were determined to have received no or inadequate PMTCT (i.e., prenatal ARVs for < 2 months, immunologic status or indication of other reasons for screening).

Conclusions: While improved PMTCT regimens are available in South Africa, a variety of individual, social, and structural factors hinder progress in ensuring access to and uptake of prevention services. These data will be used to improve the operation and promotion of PMTCT services for pregnant women in Soweto.

Presentation author email: amc32@fsu.ca

Abstract Book Volume 2 | www.aids2010.org
WEPE0809
A street-based HIV testing program in Madrid as a strategy to reduce late HIV-diagnosis
J. Álvarez1, J. Gutiérrez1, J. Hoyos1, C. Rodríguez1, P. Segura1, R. Sánchez1, J. Pulido1, E. Ferreras1
1Asociación Madrid Positivo, Madrid, Spain, 2Escuela Nacional de Salud, Instituto de Salud Carlos III, Madrid, Spain, 3CIBER Epidemiología y Salud Pública, Barcelona, Spain, 4Centro Sanitario Sandoval, Madrid, Spain, 5Centro Nacional de Epidemiología, Instituto de Salud Carlos III, Madrid, Spain

Background: To evaluate an outreach street-based HIV testing program, analyzing two characteristics of the test: its quality and the percentage of positives with CD4 <350.

Methods: 3151 persons who received rapid HIV tests (Determine HIV-1/2) in 2008, in a van in a street of downtown Madrid. After signing an informed consent, a blood sample was collected and a self-administered questionnaire was filled during the 20 minutes results waiting period. Those who showed a reactive result were referred for confirmation to health centers.

Results: Sixty-four percent of the participants were male, 35 immigrants, 55% of the males and 68% of the females were <30 years of age, and 49.5% were university graduates. Fifteen percent of the tested male had <200 CD4 (MSM) and 2.6% participants reported injecting drug use. Fifty-six percent females and 39% males had not undergone previous testing. Ninety-five percent of the females and 85.7% of the males were women who had used injected drugs and 6.3% women. A CD4 count was obtained for the 68.7% confirmed positive results (78% Spaniards vs. 60% immigrants). Thirty percent of confirmed positives had <350 CD4 (63.5% Spaniards vs. 21% immigrants).

Conclusions: The program reached mainly men, young people, persons with university education, and a large proportion of immigrants. Most of the positives were MSM and half of them were immigrants. The proportion of positives with <350 CD4 was four times lower than the overall number of new cases diagnosed in Spain.

Support: FIPSE 36634/07 and FIS PS09/0706

Presenting author email: am@madripositivo.org

WEPE0810
Comparing screening definitions for antiretroviral therapy (ART) failure
C.K. Voraks1, H. Twvea2, R. Weigel3, S. Phiri, M. Hosseinipour4,5
1UNC Project, Fogarty Scholar, Lilongwe, Malawi, 2Well Cornell Medical College, New York, United States, 3CIBER Epidemiología y Salud Pública, Barcelona, Spain, 4Centro Nacional de Epidemiología, Instituto de Salud Carlos III, Madrid, Spain, 5University of North Carolina at Chapel Hill, Chapel Hill, United States

Background: Evaluating treatment failure is critical when deciding to modify ART. WHO immunologic failure guidelines identify a significant number of non-failing patients per virologic failure criteria (>400 viral copies/mL) and confirmatory testing is recommended. Given limited laboratory capacity and facilities with second line therapy, Malawi modified national guidelines to prevent excessive screening.

Methods: Using the Electronic Medical Record, we retrospectively reviewed virologic failure screening among ART patients >15 years old who met either the 2006 WHO (WHO: CD4< baseline OR CD4< 50% of peak OR CD4 per-sidely < 100 cells after 1 year of treatment) or Malawi Version 3 (Malawi v3: On ART for >12 months and new CD4< baseline OR CD4< 50% of peak OR CD4< 200) definition for immunologic failure at the Lighthouse clinic from 12/2007-12/2009. Treatment modifications were recorded.

Results: 7,032 enrolled ART patients >15 years old with at least one CD4 count, 792 (10%) patients met at least one of the two immunologic failure definitions. 702 (100%) met WHO criteria, for whom 65 (9%) viral loads were ordered; 28 (43%) were detectable and 16 (57%) were switched to alternative second line therapy. 266 met Malawi v3, for whom 38 (14%) viral loads were ordered; 19 (50%) were detectable and 14 (74%) switched therapy. However, over 30% of those with virologic failure were missed.

Conclusions: Clinicians failed to report immunologic failures for screening, regardless of criteria. Training for identification of failure is needed, and electronic record systems should be modified to alert clinicians when an immunologic criteria is met. While VAFs may have utility, improving monitoring and automation during implementation is needed to optimize their screening efficacy.

Presenting author email: cvoraks@gmail.com

WEPE0811
"Life goes on and I am not alone" - interdisciplinary trainings empower German HIV patients: an impact assessment
V. Brüning, B. Vielhaber, U. Clement-Wachtler, G. Rosenkrantz, S. Körber, C. Möhrs, K. Pointner
Gesundheitsbildender HIV/AIDS e.V. Gesundheitsbildender HIV/AIDS e.V. Berlin, Germany

Background: In countries with comprehensive HIV management programmes patients can feel overwhelmed by the medical specificities of their therapy and left alone in trying to develop contraception and communication skills. German NGO offers interdisciplinary trainings to people living with HIV/AIDS (PLWA) which cover medical knowledge (treatment literacy), patient/doctor relationships, communication, law, life style choices (nutrition, physical activity), life planning, psycho-social aspects and coping strategies. Trainings were evaluated regarding their impact on patients’ lives and potential improvements of the curriculum.

Methods: The assessment includes trainings with 42 participants of which 31 (7 females) returned a questionnaire consisting of standardized questions and space for comments.

Results: The overwhelming majority of respondents evaluated participation in the trainings as highly beneficial. Topics most appreciated were medical knowledge (mentioned by 25 participants), partnership and sexuality (15), law (12) and HIV & self (9). Improved medical understanding had practical consequences: 19 already in therapy 7 approached their doctors about changing their regime and 13 had discovered new ways of managing side effects. On a personal level, 23 had developed better attitudes towards their partners. The most important benefit to participants was speaking with peers (23). “Life goes on and I am not alone”, summarized one participant what the trainings meant for many.

Conclusions: Data supported the training curriculum in principle and suggested a need for additional emphasis on communication with partners, friends and at the workplace. Training experiences illustrate that even in the well developed German system PLWA need to structure the areas of hard skills (knowledge) and soft skills (communication, relationships, coping). The concept and curriculum may be a valuable tool in other countries with even lower levels of knowledge and resources.

Presenting author email: viviane.brune@rub.de

WEPE0812
Evaluating effectiveness: building organizational capacity to implement and utilize evaluation to improve HIV prevention interventions for women
K. Ferree1, C. Gomez1, S. Kinskey1
1National AIDS Fund, Washington, United States, 2San Francisco State University, Health Equity Institute, San Francisco, United States

Issues: In order to reach women in the U.S. who are most impacted by HIV (sex workers, immigrants, incarcerated women, etc.), organizations need to utilize evaluation to ensure that interventions are effective. However, organizations best positioned to reach at-risk women often lack the capacity to conduct comprehensive evaluation or understand evaluation only in the context of meeting funder deliverables.

Description: The National AIDS Fund’s GENERATIONS Initiative empowered eight U.S. grantee organizations to create or adapt evidence-based interventions for women. One objective of this initiative was to increase organizational capacity to conduct program evaluation.

Results: GENERATIONS is a two-part initiative, split into Formative and Implementation Phases. In the four-month Formative Phase, grantees designed and tested an innovative prevention intervention and developed evaluation tools with the help of an independent evaluator. Formative evaluation consisted of focus groups, key informant interviews, and pilot testing.

In the 24-month Implementation Phase, grantees implemented their intervention, collected process and outcome evaluation data, and reviewed results to make programming improvements. Outcome data was gathered via pre- and post-tests that assessed changes in participants’ knowledge, attitudes, and behavior. Grantees collected process data (facilitator feedback and fidelity measures, etc.) as well as qualitative data (participant interviews, focus groups, etc.).

Lessons learned: Provision of technical assistance facilitated organizations’ utilization of evaluation data. Agencies took advantage of the formative evaluation period to assess feasibility of initial ideas. Involving all staff in the evaluation process fostered empowerment and commitment to viewing evaluation data as an effective tool and an integral part of their work. Because staff created interventions and were invested in their success, they were able to effectively integrate evaluation results into continuous quality improvement efforts. We discovered a “ripple effect” in that a single skill transfer interested other organizational programs.

Next steps: GENERATIONS was successful in increasing organizations’ evaluation capacity. This model can be easily replicated by other funders.

Presenting author email: dgomez@sfu.edu

WEPE0813
Evaluation of a rescue treatment program from Argentina’s Ministry of Health
V. Curras, C. Baller, E. Bisio, D. Martinez Madrid, C. Falistico
Ministerio de Salud de la Nación (National Ministry of Health), Buenos Aires, Argentina

Background: Since late 2008, enfuvirtide, darunavir and tipranavir have been incorporated into the list of drugs provided by the "Dirección Nacional de Sida y ETS" of Argentina’s Ministry of Health (GSyETS). Although these drugs have been extensively evaluated in multiple clinical trials, it is necessary to...
evaluate their clinical effectiveness in population terms and in real scenarios.

**Objective:** To describe and evaluate the effectiveness of a rescue program from the Ministry of Health that provides dolutegravir, lopinavir and/ or enfuvirtide to HIV+ patients with multiple treatment failures or primary resistance.

**Methods:** Retrospective cohort study. Demographic variables, information about HIV infection, treatment history and efficacy measures (CD4, viral load) were collected at baseline and at regular intervals after starting rescue treatment. Mortality was also recorded.

**Results:** The program enrolled 114 patients so far; 76 were male, mean ±SD age was 42.7 years (±8.65; range:18-62), median time since HIV infection was 10.7 years. Median CD4 count ± SD was 163 cells/mm3 (±60-264). According to resistance tests, 47.6% had extensive resistance to 3 drugs classes, 43% to 2 drug classes.

**Conclusions:** In future, efforts need to be focused on improving the uptake and effectiveness of the program.

**Partially supported by Fogarty-ATRP Grant #5D43TW001037**

---

**WEPE0814**

**Effectiveness of a district-wide programme for the prevention of mother-to-child transmission of HIV in Phnom Penh and Kandal**

D. Augustinova1, A. Stranska1, K. Chebenova1, K. Kanal1, S. Ean1, S. Wong, C. Kong, S. Gign1, E. Nerrient2, M. Bandzak1

**Background:** Transmissions of HIV-1 (PMTCT) programs are scaling up, the uptake and effectiveness of the program has been conducted.

**Objective:** To evaluate the progress of PMTCT interventions in Cambodia - experience from six maternity units in Phnom Penh and Kandal province in Cambodia.

**Methods:** Individual and group counseling were conducted. Prenatal HIV testing were performed using Serodia and Determine resistant tests. HAART, or preventive ARVs drugs, were administered to the mothers and children according to national recommendations. Diagnosis of HIV infection in babies (heel prick blood spotted on DBS) was done by mean of HIV-1 DNA real time PCR according to the national recommendations. Diagnosis of HIV infection in babies was done by mean of HIV-1 DNA real time PCR.

**Results:** From 2006 to 2009, 35,860 pregnant women visited the ANC (number of ANC attendees =176,994), 48,695 (90.41%) accepted pre-test counseling, 41,871 received post-test counseling and 47,991(98.55%) the HIV testing. 21,000 were started on COE care, 74,191(74.1%) are in care (COE 73.4%, PNC 78.9%, p=0.089). Mortality rate among infants not on HAART was 0.270 deaths/pyo compared to 0.046 deaths/pyo for those on HAART. Linking EID to PMTCT improves its effectiveness. Over a quarter of the babies identified by this pilot program are lost after enrolment. Being on HAART reduces mortality by 6-fold.

**Presenting author email:** aketiklimba@baylor-uganda.org

---

**WEPE0816**

**Health system factors more important than stigma in PMTCT interventions uptake**

K. Nitnija1, J. Kaste1, R. Nduati2, C. Farquhar3, B. Richardson3, D. Mboi-Ngacha1, G. John-Stewart3

**Background:** Successful implementation of prevention of mother-to-child transmission of HIV (PMTCT) interventions in developing countries focuses on reducing the transmission of HIV during pregnancy and delivery of antiretrovirals (ARVs) to mothers and infants. However, in sub-Saharan Africa where most infant infections occur, PMTCT efforts are hampered by low prenatal HIV testing and ARV utilization. Inadequate delivery of PMTCT services impedes its delivery. Defining barriers to PMTCT utilization is therefore important in designing effective PMTCT programs.

**Methods:** Mothers bringing infants for 6-week immunizations at 6 maternal-child-health clinics in Nairobi and Western Kenya were assessed. A questionnaire was administered to assess sociodemographics, stigma, and PMTCT participation during the recent pregnancy.

**Results:** Of 2,700 mothers enrolled, 210 (7.9%) had not received antenatal HIV testing. Of these, 156 (73%) had attended antenatal care, most (60%) of whom were untested due to unavailability of HIV testing services, failure by providers to offer testing or long wait times at the clinic. Untested mothers were more likely to have less than secondary education (83.2% vs 74.9%, p=0.01), to be from Western Kenya (47.1% vs 32.2%, p=0.001) and of lower socioeconomic status. In multivariate analysis, lower education (OR=1.7, 95% CI: 1.1-2.6, p=0.009), socioeconomic status (OR=1.4, 95% CI: 1.0-2.0) and Western Kenya (OR=1.7, 95% CI: 1.3-2.3, p=0.001) were independently associated with not testing. Among mothers identified antenatally as HIV infected, 80% used maternal or infant ARVs. Although internal and external stigma measures were reported by 12-55% of women, these measures were not associated with HIV test or ARV uptake. The overall rate of infant infection at 6 weeks was 7.9%.

**Conclusions:** This postnatal assessment of PMTCT uptake in Kenya demonstrated remarkably high (92%) prenatal HIV testing and ARV uptake (80%), and low infant HIV-1 infection risk (7.9%) despite substantial self-reported stigma. These results reflect a rapidly expanding effective national PMTCT program in which health systems factors rather than stigma contribute residual barriers to PMTCT uptake.

**Presenting author email:** kinutijia2000@yahoo.com

---

**WEPE0817**

**Grading Goals: a systematic review of studies in the Goals model**

L. Bollinger1, K. Perham, W. DeCormier Rosky2

**Background:** The Goals model is used by many countries to assist in setting priorities for national HIV/AIDS strategic plans. The model calculates the cost-effectiveness of HIV prevention interventions based on collating existing studies. This paper evaluates the quality of the studies included in the model using a systematic review method.

**Methods:** The Goals model calculates the cost-effectiveness of HIV prevention interventions based on an impact matrix which combines results from studies that evaluate of HIV prevention interventions in developing countries. The impact matrix is calculated for five different risk groups (high, medium, low, men who have sex with men, injecting drug users) and four different behaviors (condom use, number of sexual partners, age at first sex, safe needle practices). In order to assess the quality of the studies in the impact matrix, we utilized a systematic review method developed by the US Center for Disease Control’s Task Force on Community Preventive Services. This method was selected because of its thoroughness, compatibility with non-randomized study designs, and significant emphasis on the quality of the execution of the study. The method classifies study execution as “Satisfactory,” “Fair,” or “Unsatisfactory” based on the number of limitations present. In addition to ensuring the quality of the studies included within Goals, using a systematic method with such clear study classifications allows weighing of study results prior to combining them into one number representing the effectiveness of the intervention for a specific risk group and behavior.

**Results:** Most studies were retained in the impact matrix, although a few were deleted due to low quality, and a weighting structure for the remaining studies was designed.

**Conclusions:** Given the central role that the impact matrix plays in the Goals model, it is important to evaluate the quality of the studies included in the model. This paper presents the results of such an evaluation.

**Presenting author email:** lbbollinger@futureinstitute.org
WEPE0818
Evaluation of the implementation, utilization and acceptability of the basic care kit (BCK) for PLWH: a pilot program in rural Kenya

M. Wendo1, M. Maina1, E. Ochigo1, N. Houben1, S. Adudans1, C. Dufour2, M. Milamay Kenya, Programs, Kisumu, Kenya, 1USAID, Office of Population and Health, Nairobi, Kenya, 2Milamay Kenya, M&E, Kisumu, Kenya

Background: Cost effective practical interventions have been shown to reduce HIV-related morbidity, mortality and transmission. Cotrimoxazole preventive therapy (CPT), long-lasting insecticide treated bed nets (LLITN), and safe water systems are inexpensive and clearly benefit PLWH by reducing the incidence of opportunistic infections (WHO 2007). Different combinations of these interventions including condoms have been presented as components of a Basic Care Kit (BCK) in Uganda, Kenya and Southern Sudan.

Methods: With funding and technical support from USAID and CDC, Population Services International piloted BCK (safe water facility, LLITN, condoms and IEC materials) distribution in 15 districts in provinces with high burden of HIV and Malaria in Kenya in March 2009. Milamay International Kenya then conducted an evaluation of the process whose findings are to inform subsequent national BCK “scale-up” in additional regions. Quantitative methods consisted of review of patient records at selected implementing sites, administering facility-based survey questionnaire to BCK recipients, conducting household observations and interviewing program staff. Qualitative component had in-depth key informant interviews with key BCK stakeholders.

Results: Distribution Initially, BCK distribution at some provinces was lower than 50%. However, the proportion of actual distribution later exceeded 100%. Acceptability Participants reported to have largely accepted BCK components. None of the BCKs were taken 100% as some items were reportedly sold on the market. Stakeholders. None of the BCKs were taken 100% as some items were reportedly sold on the market. Some items were reportedly sold on the market. Condom use was reportedly high among those who discussed condoms with their partners. 89.1% were on CPT and 49.6% on multivitamins.

Conclusions: Mass distribution of BCK is feasible; however this is dependent on good coordination between stakeholders. Due to high acceptability and utilisation of BCK components we recommend it be included as part of a combined HIV prevention package for HIV programs.

We present author email: mwendo@milamay.or.ke

WEPE0819
Economic evaluation of tenofovir disoproxil fumarate and zidovudine in first-line HIV antiretroviral treatment in South Africa

C. Marais,1 R. Shaw,1 F. Conradie,1 T. Stander,1 B. Williams1 1Health Econometric & Outcomes Research (Pty) Ltd, Midrand, South Africa, 2Clinical HIV Research Unit, Johannesburg, South Africa, 3University of Stellenbosch, Southern African Centre for Epidemiological Modelling and Analysis, Stellenbosch, South Africa

Background: The World Health Organization recommends the use of tenofovir (TDF) and zidovudine (AZT) instead of d4T. Previously we showed that TDF is highly cost-effective in first-line treatment compared to d4T in South Africa (incremental cost-effectiveness ratio (ICER) less than 1x GDP/capita). Accordingly, we estimate the life-time South African (SA) ICER and budget impact of TDF vs. AZT as well as AZT vs. d4T in first-line treatment.

Methods: A Markov model was developed and populated using SA data, including costs of ARVs, patient care, adverse events and opportunistic infections. SA ARV tender prices (monthly prices) were used, (d4T = US$2.96, TDF = US$17.00 and AZT = US$12.25) as well as international generic prices (TDF = US$8.25 and AZT = US$8.00).

Results: A Markov model was developed and populated using SA data, including costs of ARVs, patient care, adverse events and opportunistic infections. SA ARV tender prices (monthly prices) were used, (d4T = US$2.96, TDF = US$17.00 and AZT = US$12.25) as well as international generic prices (TDF = US$8.25 and AZT = US$8.00).

Conclusions: Both TDF and AZT treatments are predicted to be highly cost-effective compared to d4T, mainly due to the offset of costs of adverse events associated with d4T. Using SA tender prices, TDF is cost-effective (ICER = 1x GDP/capita) compared to AZT while the budget impact is ~3.8% increase from year 1 to 4. Using international generic prices, TDF is highly cost-effective (ICER = 1x GDP/capita) compared to AZT with cost savings from year one to four.

Presenting author email: christian.marais12@gmail.com

WEPE0820
Past and future population costs for treating people living with HIV in the UK, 1997-2013

S. Mandalia1, R. Mandaliya1, G. Lo2, T. Chadborn3, P. Sharratt1, M. Youle1, J. Anderson1, G. Baily1, R. Brettle1, M. Fisher1, M. Gompets1, G. Kinghorn1, M. Johnson1, B. McCarron1, A. Poznick1, A. Tang1, J. Walsh1, I. Williams1, B. Gazzard1, E.J. Beck1, NPMH-HHC Steering Group

1NPMH-HHC, London, United Kingdom, 2London Specialised Commissioning Group, London, United Kingdom

Background: The number of people living with HIV (PLHIV) is rising in the world including industrialized societies. More PLHIV will require access to health services, which are likely to result in increased population costs. This study calculated the population cost of providing HIV services in the UK NHS, 1997-2006 and projected future costs for 2007-2011.

Methods: Annual costs of HIV treatment by CDC stage of HIV infection were calculated for 1997 till 2006. Data on mean use of services from 15 NPMH-HHC HIV clinics were multiplied by their unit costs, including anti-retroviral (ART) drug prices. The annual number of PLHIV using NHS services between 1997 and 2006 by CDC stage was projected for 2007-2013. Annual population costs were obtained by multiplying the number of PLHIV by CDC stage by their annual cost (US$ 2006 prices).

Results: In the UK total number of PLHIV using NHS services was 15,530 in 1997, 56,275 in 2006 and it was estimated to rise to 78,506 by 2013. Population cost in 1997 was US$192 million, US$899 million in 2006 and an estimated projection of US$1346 million by 2013. When community care costs were included, these costs were US$304 million in 1997, US$1259 million in 2006 and US$1901 million in 2013 respectively.

Conclusions: The number of PLHIV using NHS HIV services increased considerably between 1997 and 2006, a trend which is anticipated to continue due to PLHIV surviving longer on ART and the relative lack of successful programming. Increased survival among PLHIV will see more PLHIV needing quadruple or more ART as well as dealing with an increasing number of co-morbid conditions. Measures need to be taken to reduce the cost of HIV treatment and care without reducing the quality of services, while greater efforts should be made to reduce the number of people becoming newly infected with HIV.

Presenting author email: s.mandalia@imperial.ac.uk

WEPE0821
How to improve HIV integrated management in ethnic minority areas with high HIV prevalence?

Z. Liu1, C. Li2, J. Zhang1, J. Zhang1, Y. Chaobo1, X. Baohua1, W. Zhengrong1 1National Center for HIV/STD Prevention and Control, Beijing, China, 2China-MSD HIV/AIDS Partnership, Beijing, China, 3China-HIV/AIDS Integrated Management Project, Beijing, China

Background: Butuo County is an Yi ethnic minority, rural and poverty-stricken county. Results from an epidemiological survey in 2008, showed that the HIV prevalence in the community was up to high epidemic. Due to the number of PLHAs, mobility, existed high risk behaviors, lack of human resources and capacity, HIV integrated and effective management in Butuo faces enormous challenges.

Methods: In response to the AIDS epidemic, the following measures have been taken, including (1) policy development, responsibility clarification, health education and promotion; (2) technical guideline development and issued, providing all-round technical support and quality guaranteed; (3) the clarification of measures, tasks and staff, and a health service network built; (4) strengthening of human capacity and improving service skills.

Results: The outputs of HIV/AIDS patient’s management are compared with the end of 2008 to July 31, 2009.

(1). The follow-up rate of newly reported cases in Butuo county has increased from 3.4% to 87.0%; of these, the pilot township of JD is from 0.0% to 100.0%.

(2). Follow-up: The follow-up rate of cumulative reported HIV survival cases is from 14.7% to 64.2%; of which, the rate of JD Township is from 9.2% to 82.6%.

(3). The 6-month CD4 test rate is from 0.3% to 22.8%, of which, the one of JD is from 0.3% to 39.3%.

(4). There are 73 eligible AIDS patients, among them, 65 received ART.

Acknowledgement: This project is funded by the National Health and Family Planning Commission of China.

Presenting author email: hongchen200606@hotmail.com
WEPE0822 Benefits of using agent-based modeling to examine the impacts of regional and local HIV prevention or treatment programmes

R.W. Genn, T.V. Schindler, R.B. Radichel, A.M. Hegedus
Northrop Grumman Corporation, Health IT Solutions, Atlanta, United States

Issue: HIV prevention programmes can be modeled to examine potential intervention outcomes and long-range effects on populations, and to provide cost-effectiveness data for decision makers. Dynamic models go beyond a mere comparison of new activities and the absence of activities. These models examine “agents” in target populations interacting with other agents, as well as agents interacting with intervention programs, leading to a range of outcomes which can help estimate program costs and results over time.

Description: Our agent-based model compares the use of mass media campaigns and peer-to-peer information dissemination for HIV prevention. Within each intervention type, basic parameters are initialized regarding the frequency of the average intervention, and the intensity and range of messages on behavior. These are stratified by gender, HIV status, and other demographic characteristics. All of these parameters and baseline conditions are modifiable within the model. Empirical data from relevant HIV prevention studies are easily entered into the model for estimating the population parameters and for cost estimates.

Lessons learned: Modeling of mass media and peer-to-peer interventions for HIV prevention provides comparisons of the daily and accumulated cost savings of each method. Our analysis showed that while a peer-to-peer intervention may take more time to start impacting and changing behaviors in the population, the changes occur rapidly once they begin. This results in greater cost savings in the long run and suggests that programmatic decisions should not be made too early, but given time to have an impact.

Next steps: HIV prevention programmes can be examined and compared among various sub-populations of injection drug users, who men have sex with men, and high-risk heterosexuals. Within and between these populations, synergies among interventions can be explored before being deployed. The developed models will be further examined and compared to existing data to provide validation and verification of the modeling process and results.

WEPE0823 Optimizing HIV prevention in Michigan: applying mathematical modeling to resource allocation

L. Randall1, D. Holtgrave2
1Michigan Department of Community Health, Division of Health, Wellness and Disease Control, Lansing, United States, 2Johns Hopkins Bloomberg School of Public Health, Department of Health, Behavior and Society, Baltimore, United States

Issues: The Michigan Department of Community Health sought to identify, given curtail of funding, the array of HIV prevention activities that would result in the identification of the most previously undiagnosed HIV infections; minimize the number of new infections and transmissions; and quantify how many high risk people would not receive HIV prevention services.

Description: This two-phase study employed mathematical modeling. Phase one examined the public health and economic costs of HIV testing approaches according to four scenarios: opt-out testing; opt-out testing with a behavioral offset; routine testing with counseling; and highly targeted testing with counseling. The optimization model employed in phase two used the best available techniques for epidemiologic modeling and relied on the scientific literature for input parameter values. This model was adapted from one used to address optimization nationally.

Lessons learned: Highly targeted testing with counseling is a better investment compared to opt-out testing. For the same resource investment ($17m), opt-out testing would result in 1,726 previously undiagnosed infections compared to 544 identified by opt-out testing and averted 151 transmissions and infections compared to 35. The optimization model suggested the need to reallocate the $8.0m available in order to achieve improvements in prevention outcomes. The model suggested the need to adjust downward funding for testing and partners services while simultaneously adjusting funding upwards for prevention services for HIV-positive and high risk negative individuals.

Next steps: Michigan has reallocated community-based resources to respond to the recommendations produced by the model and is in the process of developing strategies to adjust funding for public health interventions. However, the model highlights that only a small fraction of people in need of HIV prevention services can access these services, guaranteeing a continued epidemic. It also projects growing HIV prevalence, indicating future growth in treatment costs and the need to strengthen linkages to care.

WEPE0824 Emergency department use by patients with HIV/AIDS before and after enrollment in a comprehensive healthcare clinic for HIV-infected patients

K.J. Lepok1, B. Barrios2, E. Grafatoni3, W. Zhang4, S. Sabeti5, S. Guilmant6, D. Lesowski5, T. Galani7, R.S. Hogg8, J.S.G. Montaner1,2
1BC Centre for Excellence in HIV/AIDS, Vancouver, BC, Canada, 2St. Paul’s Hospital, Providence Health Care, Vancouver, Canada

Background: This study compares Emergency Department (ED) utilization by HIV-infected patients before and after an enrollment in an HIV-focused ambulatory clinic.

Methods: Subjects ≥19 years with clinic enrollment between 01-Jan-2004 and 31-Dec-2005 and HIV-positive diagnosis ±12 months pre-enrollment were included. Medical history and ED visits were obtained from clinic and hospital ED databases. ED visit reason and acuity were classified by Canadian Triage and Acuity Scale. Descriptive statistics summarized demographic and clinic variables and ED visits occurring 12 months pre and post clinic enrollment. Differences between periods were evaluated by Chi-square.

Results: 460 patients were included. At clinic enrollment, median age was 39 years, 85% were male and 32% ever injected intravenous drugs. In the 12 months post- and pre-enrollment, 69% vs. 81% (< 0.0001) of patients received antiretroviral therapy, 51% vs. 69% (< 0.001) had plasma viral load ≤50 copies/mL and 78% vs. 82% had CD4 ≥200/mL. There were no statistically significant differences between the pre- and post-enrollment ED visits per patient, mean sd (2.3±4.6 vs. 2.9±4.9), or proportion of patients with 1-3 ED visits (29% vs. 28%) or >3 ED visits (15% vs. 17%).

Analysis of individual ED visits showed significant reductions in visits leading to hospitalization, lower symptom acuity and fewer ED visits during clinic hours post-enrollment (Table). The proportion of ED visits due to minor complaints increased post-enrollment, largely driven by IV antibiotic administration.

Conclusions: Enrollment in a clinic specializing in HIV/AIDS care reduced ED visit acuity and hospital admission rate but not number of visits. Provision of clinic-based IV antibiotics could reduce ED visits.

Author Index

Impact of HIV-related programmes on and integration with other health services
WEPE0824-WEPE0831

WEPE0825 Assessing the strength of HIV/TB linkage services in a teaching hospital of Eastern India

D. Ray, D. Bandopadhayay, S. Singh
Medical College Kolkata, Medicine, Kolkata, India

Background: Appreciating the importance of HIV and TB associations, there has been a global effort to link these two service areas, and India has taken up this initiative in right earnest. Our hospital caters to a large number of HIV patients and participates in HIV-TB coordination efforts. We tried to assess the strength of ICTC and DOTS referral linkages.

Methods: This study was conducted at Medical College Kolkata and data for the period of January 2007 to June 2009 was analyzed. This was an observational record review study.

Results: A total of 360 ICTC clients (45.6% ICTC positive, Group A, 54.4% ICTC negative, Group B) were referred to the DOTS center. Of these 81.7 and 61.2 % reached from groups A and B, respectively (p = 0.0031: OR=2.83, 95% CI 1.42, 5.65). The outcomes were: 20.5 % sputum +ve, 71.5 % sputum -ve TB and the remaining 72.4 % non-TB. On the other side, 524 TB patients were referred from the DOTS Center to the ICTC. 93.9 % of those attended the ICTC Center and 19.9 % tested positive for HIV antibodies which was significantly higher than the general seropositivity rate of 7.2 % at our ICTC Center during the same period (p < 0.0001: OR=3.17, 95% CI 2.11, 4.75). The overall efficacy of HIV TB linkage services was 84.4 % during this period.

Conclusions: Referrals between ICTC and DOTS providers exist, but need to be strengthened. Moreover, success of referral to DOTS was weaker, as asymptomatic VCTC clients often chose to avoid further testing, especially for 2 consecutive days. The referrals from DOTS to the ICTC were more efficacious as these were essentially TB patients, on treatment. Upscaling counseling services appears to be the need of the hour.

Presenting author email: ddeep_dr1982@yahoo.co.in
WEPE0826
Provider perspectives on integration of HIV care and treatment into antenatal care in rural Kenya: A qualitative investigative study
L. E. Winestone1, E. A. Bukusi2, C. R. Cohen2, D. Kwaro3, N. C. Kley1, T. F. Teman1
1Stanford University, School of Medicine, Stanford, United States, 2Kenya Medical Research Institute (KEMRI), Centre for Microbiology Research, Reception and Referral Unit, Kisumu, Kenya, 3University of California at San Francisco, Department of Obstetrics, Gynecology and Reproductive Sciences, San Francisco, United States

Background: Integration of HIV care and treatment into antenatal care (ANC) services is one of the most promising new strategies for improving pregnant women’s access to HIV services. However, integration will likely have significant effects on the daily workload of healthcare providers who offer these services. We aimed to explore the perspectives of healthcare providers on the advantages and disadvantages of integrating HIV services, including high-risk, active antiretroviral therapy (HAART), into ANC in rural Kenya.

Methods: This qualitative study was conducted prior to the initiation of a cluster randomized trial of service integration at six rural health facilities in Nyanza Province, Kenya. Thirty-six healthcare providers (including clinical officers, nurses, midwives, community health workers, and volunteers) participated in in-depth interviews. Data were coded and analyzed using a thematic analysis approach.

Results: Healthcare providers emphasized the effects of integration on providers, patients, and HIV care. Effects on service providers included increased workloads due to the need to incorporate specialized HIV services into ANC care. Providers felt that integration would result in decreased patient time spent at the health facility, increased efficiency, and closer provider-patient relationships; all leading to increased patient satisfaction. Providers also predicted that due to improved confidentiality and decreased stigma, women would be more likely to receive HAART and adhere to their treatment. However, they worried that integrating services in ANC would result in unwanted disclosure and stigma, if HIV-positive women have longer appointments than HIV-negative women.

Conclusions: Integration could improve the services provided to HIV-positive pregnant women in a variety of ways, leading to strengthened antenatal care, postpartum care, prevention of mother-to-child transmission and HIV care for women and their families. However, integration efforts need to take into account potential negative effects on ANC provider workload, confidentiality, and the quality of care.

Presenting author email: lena.winestone@stanford.edu

WEPE0827
Stabilizing the drug using people who are living with HIV/AIDS
B. Pandey, S. R. Joshi, I. K. Sharma
Youth Vision, Kathmandu, Nepal

Background: Proactive advocacy was conducted by Youth Vision since 2005 for introduction of Opioid Substitution Therapy using buprenorphine and heroin, the most commonly used substances by drug users at Nepal and thus the sublingual buprenorphine active antiretroviral therapy (HAART), into ANC in rural Kenya.

Methods: This qualitative study was conducted prior to the initiation of a cluster randomized trial of service integration at six rural health facilities in Nyanza Province, Kenya. Thirty-six healthcare providers (including clinical officers, nurses, midwives, community health workers, and volunteers) participated in in-depth interviews. Data were coded and analyzed using a thematic analysis approach.

Results: Healthcare providers emphasized the effects of integration on providers, patients, and HIV care. Effects on service providers included increased workloads due to the need to incorporate specialized HIV services into ANC care. Providers felt that integration would result in decreased patient time spent at the health facility, increased efficiency, and closer provider-patient relationships; all leading to increased patient satisfaction. Providers also predicted that due to increased confidentiality and decreased stigma, women would be more likely to receive HAART and adhere to their treatment. However, they worried that integrating services in ANC would result in unwanted disclosure and stigma, if HIV-positive women have longer appointments than HIV-negative women.

Conclusions: Integration could improve the services provided to HIV-positive pregnant women in a variety of ways, leading to strengthened antenatal care, postpartum care, prevention of mother-to-child transmission and HIV care for women and their families. However, integration efforts need to take into account potential negative effects on ANC provider workload, confidentiality, and the quality of care.

Presenting author email: lena.winestone@stanford.edu

WEPE0828
Reviving pediatric care through strengthening pediatric HIV treatment
P.M. Cambell1, C.V. Mean1, R. Horn2
1UNICEF Cambodia, HIV Programme, Phnom Penh, Cambodia, 2Ministry of Health, Royal Government of Cambodia, National Centre for HIV/AIDS, Dermatology and STDs, Phnom Penh, Cambodia, Independent Consultant, Bangkok, Thailand

Issues: After decades of conflict, Cambodia’s health infrastructure was shattered. The nation was also hardest hit by HIV in East Asia and the Pacific, peaking at 3.3 percent in 1998. Up to 65,000 people, including children, are living with HIV, of whom 33,500 need treatment. However, only 22 percent of Cambodians seek treatment and care at public health facilities. Meeting the goal of increasing coverage of paediatric HIV treatment from one national hospital to 32 sites countrywide by 2010, through integration in public health services, was a challenge.

Description: With the support of development partners, Cambodia’s Ministry of Health used AIDS resources to build a paediatric health care system so that all children, including those living with HIV, can be reached, treated and cared for. Subsequently, by 2009, 29 paediatric care facilities were established in provincial hospitals, offering curative and severe malnourishment services, as well as HIV treatment and care. This integrated approach enabled the identification of HIV-infected children presenting with opportunistic illnesses or malnutrition. The number of children receiving antiretroviral or care increased from 2,200 in 2005 to 5,414 in 2009.

Lessons learned: Improving the physical facilities of paediatric wards dramatically improved patient uptake, thereby reaching more children living with HIV. Strong NGO/PLWH involvement is crucial to amplify gains and prevent loss of patients during follow-up. To further improve quality of services and adherence, build staff capacities to better address disclosure to children and the needs of older children and adolescents living with HIV.

Next steps: Scale advocacy efforts with government and donors to resource broad paediatric health care. Strengthen linkages between MCH, RH, STI and HIV programs, including paediatric care and HIV programs, while institution-ising cash allowances for poor patients, often travelling long distances. Performance-based incentives for all staff should be considered for strengthening the health care system as a whole.

Presenting author email: kvasarehly@irmacs.sfu.ca

WEPE0829
The potential impact of HAART expansion on hospital utilization and related costs
Vancouver, Canada
K. Vasarehly1,2, P. Basta1, R.S. Hogg1, S. Kanters1, J.S.G. Montaner1, B. Rama1,2, A.A.R. Rutherford2, R.W. Wittenberg3, B. Vip1, B. Barnes1
1BC Centre for Excellence in HIV/AIDS, Vancouver, Canada, 2Simon Fraser University, Faculty of Health Sciences, Burnaby, Canada, 3Simon Fraser University, Department of Mathematics, Burnaby, Canada

Background: Treatment of AIDS-defining illnesses (ADIs) frequently requires hospitalization. Highly active antiretroviral therapy (HAART) decreases the incidence of common ADIs. We use a mathematical model to evaluate the potential impact of expanding HAART coverage on hospitalizations for ADIs and AIDS-related acute care costs.

Methods: We constructed a deterministic transmission model with five compartments: (1) susceptible; (2) HIV-infected; (3) ICU and (4) non-ICU bed users; and (5) on HAART. ADI incidence data from 1999-2007 for an inner-city Vancouver hospital were used to estimate admission rates, with the three most common infections (pneumocystis carinii pneumonia, mycobacterium avium complex, upper respiratory candidiasis) assigned as proxies for ICU/non-ICU utilization. The model assumes that a HAART program is in place and evaluates the impact of further expansion. Infection, adherence, and mortality rates and hospitalization costs are based on data from the Drug Treatment Program (DTP), which provides HAART, and published sources. A cost function is applied to simulated utilization rates for various HAART expansion scenarios.

Results: After 5 years, non-ICU and ICU bed utilization are predicted to drop from 3112 to 1195 bed days/year and 411 to 141 bed days/year, respectively (Fig 1), if direct admissions to the DTP increase from 0 to an annualized rate of 30% of the non-hospitalized infected population. Associated total savings are projected to be Cdn$4.3 million in the fifth year, increasing further in subsequent years.

Conclusions: Our model results suggest that HAART expansion is expected to substantially reduce hospital utilization due to ADIs and their related costs.
WEPE0830
HIV programming contributes to overall institutional capacity building in health care facilities in Uganda
O. Morina1, A. Rider, T.M. James2, H. Mweesi2
1CRS, Health/HIV, Kampala, Uganda, 2CRS, Kampala, Uganda, 1CRS, Nairobi, Kenya; `Villa Maria Hospital, Masaka, Uganda

Issues: Health care management in rural Uganda faces challenges of insufficient human resource capacity, dilapidated infrastructure, unsophisticated laboratory technology, and insufficient financial and health management capacity.

Description: Since 2004, our Local Partner Treatment Facilities (LPTFs) have been supported in providing quality HIV services through training and on-site mentoring of staff in clinical care, lab diagnostics, pharmaceutical supply chain, strategic information, financial and overall program management. These activities have augmented human resource and infrastructure capacity thereby increasing the provision of quality care to the rural population living with HIV, especially in the broader pool of patients. Since the program inception, the number of HIV patients reached has increased to a total of 25,000 patients receiving ART and more than 70,000 patients receiving HIV/AIDS care. On average this coincided with a 400% rise in the volume of lab tests carried out, a 6 fold rise in volume of ARVs handled with increased capacity to forecast and account for all drugs, and a 300% rise in volume of financial transactions that are compliant with accounting principles.

Lessons learned: Effective management of a larger pool of patients was made possible through strengthened human resource policies, enhanced clinical and financial management guidelines and the provision of technology and appropriate technical assistance to support sustainable, high-quality health service delivery. The increased capacity of LPTFs to manage program funds, large amounts of ART commodities, and increased demand for laboratory services in a compliant manner has enhanced the overall institutional capacity and credibility for potential donors.

Next steps: Our program will focus on increased sustainable integration for program planning and implementation of HIV care and treatment services into all departments of the LPTFs. Additionally, we plan to conduct periodic institutional capacity assessments and develop clear plans for addressing any emerging gaps with the aim of continuous strengthening of health systems.

Presenting author email: omorina@ug.earo.crs.org

WEPE0831
Integrating family planning (FP) in HIV/AIDS care model: experience in Adult Infectious Diseases Clinic (AIDC), in Uganda
F. Ssewanyanga1, C. Naluwuga1, S. Wежjii1, I. Lutalo1, Y. Norg1, A. Kambugu1
1Infectious Disease Institute, Makerere University, Prevention, Care and Treatment, Infectious Disease Institute, Makerere University, Grants, Kampala, Uganda

Issues: As access to antiretroviral therapy improves many of HIV-positive women are living longer, healthy and can get pregnant. FP services are inadequate or under utilized in many ART centers.

Description: In September 2008, AIDC was awarded a grant to implement a one-year project to integrate FP into its HIV/AIDS care. The intervention aimed at reducing the incidence of unintended pregnancies from 60% to 20% in the ART eligible HIV+ group in reproductive age (15-49 years). The intervention developed an integrated FP/ART training curriculum, trained Health workers (HCW), distributed IEC Materials, captured data on sexual reproductive health indicators into its electronic database and trained peer support groups who supported FP in AIDC. Subsequently, Ministry of health-Uganda accredited AIDC-FP/HCW care.

Lessons learned: Meeting the unmet needs for FP for persons living with HIV/AIDS requires more than making the FP services and methods available at HIV out-patient clinics. Dedicated providers improve utilization of integrated FP within a context of a busy HIV clinic. Broad consultations that built on existing local experience by other partners in FP-HIV integration enabled successful implementation of integrated FP-HIV service at IDI. Integrating FP indicators in patients follow-up forms ensures that client’ SRH/FP issues are addressed in time.

Next steps: Integration FP/HCW services should provide full range of FP options to facilitate utilization of services to meet clients’ needs. Training of HCWs for FP/HCW integration should seek to address attitudinal gaps besides knowledge and skills. There is indeed particular need to monitor and address attitudinal gaps during post-training.

Presenting author email: fsewa@yahoocom

WEPE0832
A systematic process for culturally adapting and implementing an evidence-based intervention in Sub-Saharan Africa
M. Poulsen1, K. Miller1, A. Weissman1, C. Obong10, J. Ochura1, S. Wyckoff1, H. Vandenbout2
1Centers for Disease Control and Prevention, Global AIDS Program, Atlanta, United States, 2Family Health International, Addis Ababa, Ethiopia, 3University of North Carolina, Chapel Hill, United States, 4Centre for Tropical Medicine, Antwerp, Belgium

Issues: The Families Matter! Program (FMP), an evidence-based HIV-prevention intervention, increases parents’ ability to protect their children from sexual risk by improving communication and protective parenting skills. Initially a US program, extensive formative work was conducted to adapt FMP for Kenya. Following positive evaluation results, FMP has reached 50,000+ Kenyan families. Kenya’s experience helped develop a streamlined adaptation and implementation process that balances the need to adapt FMP for new contexts and maintain its effectiveness. To date, six African countries are following this process to adopt FMP.

Description: First, funded partner organizations conduct an assessment to determine community need and desire for FMP. Second, adaptations are made, including: translating needs assessment findings throughout program activities (e.g., country-specific HIV risk behaviors); incorporating culturally-relevant examples, and redesigning materials to be visually appealing and appropriate for local literacy levels. Diverse community members participate in workshops to develop materials that are culturally appropriate. Third, qualified facilitators are trained to deliver FMP. Fourth, a pilot-test validates adaptations and prepares facilitators for program delivery. Fifth, community mobilization and implementation begins; monitoring intervention cycles assesses implementation procedures.

Lessons learned: Six countries are using this systematic process. By December 2010, 4940 families in Kenya’s experience helped develop a streamlined adaptation and implementation process that balances the need to adapt FMP for new contexts and maintain its effectiveness. To date, six African countries are following this process to adopt FMP.

Next steps: The described process has been successful in disseminating an evidence-based intervention to multiple cultures and may be useful to implementers rolling-out effective HIV prevention interventions.

Presenting author email: mpoulsen@cdc.gov

WEPE0833
Reduction in population mortality associated with scaling-up HIV/AIDS care and antiretroviral treatment in rural Malawi: evidence from death registers, coffin sales and church funerals
B. Mwagomba1, B. Zachariah1, M. Massaquoi1, D. Misendi1, M. Manzi1, B.C. Mander1, B. Bemelmans2, M. Philip1, K. Komoto3, E. Schouten4,5, A.D. Harries1,6,7
1Ministry of Health and Population, Thysol District Health Services, Thysol, Malawi, 2Medecins sans Frontières, Brussels Operational Centre, Operational Research Department, Luxembourg, 3Medecins sans Frontieres, Brussels, Belgium, 4Ministry of Health, Health and Population, HIV/AIDS Unit, Lilongwe, Malawi, 5Ministry of Health and Population, HIV/AIDS Technical Advisor, Lilongwe, Malawi, 6International Union against TB and Lung Disease, Centre for Operational Research, Paris, France, 7London School of Hygiene & Tropical Medicine, London, United Kingdom

Background: To report on the trend in all-cause mortality in a rural district of Malawi that has successfully scaled-up HIV/AIDS care including antiretroviral treatment (ART) to its population, through corroborative evidence from a) registered deaths at traditional authorities (TAs), b) coffin sales and c) church funerals.

Methods: Par 000001, 989 P 000001 and 197, P 000001 respectively). Using data from TAs as the most reliable source of data on deaths, overall death rate reduction was 37% (95% CI:33-40) for the period. The mean annual incremental death rate reduction was 0.53/1000/year. Death rates decreased over time as the percentage of people living with HIV/AIDS enrolled into care and ART increased. Extrapolating these data to the entire district population, an estimated 10,156 (95% CI:9786-10,295) deaths occurred during the 8-year period. Retrospective study in 5 of 12 TAs (covering approximately 50% of the population) during year 2007-2008.

Results: A total of 210 villages, 24 coffin workshops and 23 churches were included. There were a total of 18,473 registered deaths at TAs, 15781 coffins sold, and 2762 church funerals. Between 2000 and 2007, there was a highly significant linear trend in the reduction of death rates in all three groups (X2 for linear trend: 338.4).

Abstract Book Volume 2 | www.aids2010.org
WEPE0834
Impact of sample transportation system on CD4 testing at Machinga District, Malawi
R.M. Rajo, M. Mackey, M. Ellis
Clinton Health Access Initiative (CHAI), Ministry of Health, Machinga, Malawi

Background: CD4 tests are only done at Central and District Hospitals in Malawi. There is no system in place to make this test available in health centers which serve the majority of patients. Previously, in order to access CD4 testing patients had to travel excessive distances to the District hospital which most could not afford to do.

Machinga District has a largely rural population of 447,243 (NSO 2007-2008), with HIV seroprevalence of 12%. A sample transportation system was designed and implemented in order to dramatically increase the number of clients accessing laboratory tests.

Methods: Sample Transport was introduced from April 2009 in phases to ensure gradual impact on the health systems. Twelve health centers providing comprehensive PMTCT services were included, and three separate routes were mapped and designed. Motorcycles were used to collect samples and deliver results twice a week at each health facility. This system was designed to maximize access while taking into account reliability, sample stability, human capacity, cost and sustainability.

Results: In 2009, the number of CD4 samples collected in the District prior to implementation was 1512; in 2009 a total of 6803 samples were processed. A significant number of clients are tested; this has resulted in a 28% increase in patients initiated on treatment.

Conclusions: It’s possible to run an effective and low-cost sample transport system in a resource limited setting. This will have significant impact on diagnosis, care and treatment of HIV-positive patients. We recommend that this be considered for scale up.

WEPE0835
The Family Medical Clinic (FMC) at the Botswana-Baylor Children’s Clinical Centre of Excellence (BBCCOE) in Gabarone, Botswana - a model of care
P. Batoo1, 2, S. Davis1, 3, M. Tolle2, 4, A. Anusband1, 2
1Botswana-Baylor Children’s Clinical Centre of Excellence, Gabarone, Botswana; 2Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children’s Hospital, Houston, United States

Issues: Paediatric HIV in sub-Saharan Africa is a family concern. The vast majority of paediatric cases are due to vertical transmission, and the implications of having parents, and often other family members, infected are profound. The same caregivers who must present children for testing, administer daily medications, and serve as role models for positive living are themselves often ill. When a caregiver dies, a child’s survival odds diminish and risk of impoverishment increases, and a child’s quality of life, social support, education, mental health and development, and nutritional status may become threatened. The FMC serves to deliver high-quality preventive care and management (ART) for adult caregivers alongside their HIV-infected children at the BBCCOE.

Description: Recognizing that healthy adults are critical to the survival of HIV-infected children, the FMC is a unique element of the care offered at the BBCCOE, in which adult-trained specialists and medical officers utilize a family-centered approach to paediatric HIV care in providing preventive care as well as HIV management. HIV-infected adult patients of BBCCOE are enrolled into the FMC based on inclusion criteria favoring the medically/socially-complicated or newly diagnosed.

Lessons learned: Adults and children are seen on the same day, often together, leading to more effective care communication and coordination. Issues surrounding disclosure, stigma, and social support are addressed by a multidisciplinary team composed of medical, nursing, social work and nutrition specialists. The reduction in number of total clinic visits required by adult caregivers resulted from the FMC model results in fewer days of missed work, lower transportation costs, and improved patient satisfaction.

Next steps: The services offered in FMC will be based on a defined package of primary care services aligned with a rigorous set of preventive care guidelines based on developing world- and Botswana-specific causes of adult morbidity and mortality.

Conclusions: Registered deaths at traditional authorities, coffin sales and church funerals show a significant trend in reduction of population level deaths associated with scaling up adult ART care and ART

Presenting author email: zachariah@internet.lu
WEPE0838
Strategies for rapid SMT scale up in highly bureaucratic settings of Ukraine

Z. Ismail, D. Bruce, S. Filippovych, O. Lebeaga, T. Perepelitsa
International HIV/AIDS Alliance in Ukraine, Kiev, Ukraine, "Yale School of Medicine, United States

Issues: Substitution maintenance treatment (SMT) is an effective tool to fight the HIV/AIDS epidemic since 60-70% of all HIV infected people are drug dependents. WHO estimates 85,000 IDUs need to be placed on SMT to halt the HIV/AIDS epidemic. 5078 patients were receiving SMT at the beginning of 2010. Over 50,000 individuals still requiring treatment, an effective strategy for rapid SMT scale up is necessary.

Description: ICF "HIV/AIDS Alliance in Ukraine" (AU) planned to scale up 11300 patients on SMT by August 2012 financed by the GFATM R6 program. By the end of 2010, Ukrainian Ministry of Health (MOH) plans a total of 8,000 SMT patients in 158 healthcare facilities. According to MOH, 80% of these SMT patients will be providing treatment for only 5-10 patients and only 8% of sites will serve over 100 patients. Rapid SMT scale up is unimpossible under the MOH scenario and such delays will result in ongoing HIV transmission. AU has started implementing a new, effective strategy for SMT expansion. The strategy includes the introduction of high-volume sites, liquid methadone and optimization of legal requirements on methadone administration and storage.

Lessons learned: Structural barriers within the healthcare system such as enormous paperwork, individual dosing of methadone taking 3 to 5 minutes instead of less than a minute, inadequate nursing support, etc hampers rapid SMT scale up. Scarcé financing and insufficient involvement of implementation partners are other prerequisites decelerating SMT development.

Next steps: AU will roll out 3-5 high-volume SMT sites capable to serve 400-500 patients each in 2010-2012 to combat the HIV/AIDS epidemic and result in a pooling of limited resources to maximally improve health outcomes among the IDUs, including primary and secondary HIV prevention. Some minor regulatory changes must be made to allow the usage of liquid methadone and to eliminate redundant medical documentation.

Presenting author email: zaheduli@gmail.com

WEPE0839
Alternative approaches to STI service delivery for high risk behavior population: a success story

S. Tucker
India HIV/AIDS, Alliance, AP, Clinical Services and Care and Support, Hyderabad, India

Issues: Under the Targeted Intervention Program, STI treatment and counseling services to high risk groups (HRGs - female sex workers and men having sex with men) are provided through program owned STI clinics. However, such clinics are not cost effective especially with low volume and scattered populations. Hence, India HIV/AIDS Alliance, Andhra Pradesh explored the feasibility of using existing public healthcare institutions as a sustainable alternative to provide long-term user-friendly STI services.

Description: Generally, public healthcare institutions in sub urban and rural areas do not have the facility for STI management. In consultation with the District and State health authorities and with the support of Andhra Pradesh AIDS Control Society, it was decided to deliver STI services through existing public healthcare infrastructure. This strategy was found to be effective, sustainable and alternative mechanism to the program owned clinics. It has been demonstrated that by proper sensitization of community and service providers, we can increase access and utilization of good quality healthcare services.

Next steps: Provision of STI services through public health system in remote areas with scattered population is a feasible and sustainable option. This model could be scaled up by integrating it with the National Rural Health Mission.

Presenting author email: s.tucker@allianceindia.org

WEPE0840
Programming with injecting drug users to reach other most-at-risk populations: an adapted and effective approach in Egypt

D. Oraby, S. Atalah1, C. Soliman1
Family Health International, Cairo, Egypt, ‘Befrienders NGO, Cairo, Egypt

Background: The 2006 Egypt Biological and Behavioral Surveillance Survey conducted by the Ministry of Health and Population and Family Health International (FHI) revealed that most-at-risk populations (MARPs) exhibit multiple risk behaviors. Injecting drug users are the primary risk group in Egypt and some female sex workers and men who have sex with men inject drugs. In 2009, IDUs comprised 69% of all sex workers. IDUs are less stigmatized than other MARPs, and they can be used as a safe entry point for outreach and implementation of targeted interventions.

Methods: FHI selected Befrienders, an NGO with active linkages with IDUs, to implement Task shifting/task sharing for MARPs and people living with HIV or AIDS (PLHA). The core component of this intervention is including IDUs in healthcare settings to provide counseling, voluntary counseling and testing (VCT), basic medical care for MARPs and PLHA, needs-based referrals, and distribution of needles/syringes and condoms.

Results: Funding by the Ford Foundation, the project began functioning in July 2008. During the first 18 months, 791 clients were reached at the street level and visited the CCC. Of these, 78% were IDUs; 22% of male visitors were men who have sex with men; and 16% of female visitors were sex workers. Sixty-six clients accessed VCT more than once being motivated by HIV peer education sessions and the sense of security they perceived in the center. Sixty-two positive clients were identified and offered required services, including referral to antiretroviral therapy.

Conclusions: Former IDUs who conducted outreach activities served as a bridge to other MARPs. Furthermore, identification of peer outreach workers enabled MARPs to adopt safer behaviors and to revisit the CCC as reported verbally in the follow up visits.

Presenting author email: csoliman@fhi-egypt.org

WEPE0841
High pre ART attrition in a community based, holistic HIV clinic in urban Kampala

S. Kalegege,1 S. Alamo-Talisuna,2 P. Sunday1, K. Ekuru1, R. Colebunders1, M. Laga1, F. Mangen1 Wawire1
Reach Out Mbuya Parish HIV/AIDS Initiative, Kampala, Uganda, 1Medical Research Council, Kampala, Uganda, 2Institute of Tropical Medicine Antwerp, Antwerp, Belgium, 3Makerere University School of Public Health, Kampala, Uganda

Background: Reach Out (R/O), a community based, holistic program targets urban, poor in Kampala. The model hinges around Community ART and TB treatment supporters who visit clients for counseling, voluntary testing, and condoms.

Methods: We analysed all client records (2001-2008) with regard to LTFU if they had reported to the facility 3 months from the last appointment date, died if confirmed dead by community workers, transferred if an official transfer letter was available, discharged after an HIV negative re-test result. A random sample of 933/2466 clients were traced and interviewed using structured open ended questionnaires to explore reasons for LTFU.

Results: Over 8 years, 7323 clients were enrolled. 4348 (58.7%) were classified as non-retained out of which 1044 (24.6%) were confirmed dead, 45 (0.5%) were incarcerated, 2666 (62.8%) were LTFU and 452 (10.6%) were transferred. Of the LTFU, 63% were Pre ART. Mortality was higher for Pre ART (50%) compared to ART (44%). Among the sub sample of 533, 30.8% stopped treatment. Pre ART clients were more likely to stop treatment (75%) compared to ART clients (20%). Females (61%) were more likely to stop treatment. Reasons for stopping treatment were: relocation out of Kampala (24%), moved outside the catchment area (16%), felt healthy (6.3%), did not want ARVs (37%), believed ARVs do not work (56%) believed prayer heals (13%).

Conclusions: A high non retention of patients was documented at R/O with high highest attrition in pre ART patients. Continuous efforts are needed to ensure follow up of Pre ART patients to ensure linkage to ART. There is need for patient satisfaction about the importance of medication even after improved physical health.

Presenting author email: salamo@reachoutmbuya.org

WEPE0842
Using community health workers to improve identification, enrollment into care, and outcomes for HIV-infected infants at the Kawale Health Centre in Lilongwe, Malawi

1Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children's Hospital, Pediatrics, Houston, United States, 2Baylor College of Medicine Abbott Fund Children's Clinical Centre of Excellence, Lilongwe, Malawi, 3Children's Hospital, Pediatrics, Houston, United States

Background: The Baylor Tanghe outreach program, which started January 2008, uses community health workers (CHWs) to improve identification and early referral to care of HIV-infected and exposed children. At Kawale Health Centre, Tanghe helpful increase patient enrollment in the pediatric HIV clinic from 8 children to 101 in 2008. Despite this impressive increase, only 26 were exposed at enrollment. To improve identification and enrollment of exposed infants, in 2009 Tanghe started assigning CHWs to HIV-infected pregnant women at diagnostic C-sections.

Methods: Tanghe's CHWs conduct HTC in clinic and the community. Pregnant women identified as HIV-infected are offered CHW services. CHWs ensure that clients receive appropriate care and exposed infants are referred promptly. Hospitals, maternities, and a database were developed to monitor CHW activities.

Results: In 2008, 101 patients were enrolled. 45 patients were under 18 months, 19 infected, 26 exposed. In 2009, 317 patients were enrolled.
WEPE0843
Task shifting for HIV/AIDS treatment in Sub-Saharan Africa: a review

M. Callaghan1, H. Schneider2, N. Ford3
1University of Toronto, Toronto, Canada, 2University of Cape Town, Cape Town, South Africa, 3Medecins sans Frontieres, Cape Town, South Africa

Background: Shortages of human resources for health (HRH) have severely hampered the rollout of antiretroviral therapy (ART) in sub-Saharan Africa. Current rollout models are hospital- and physician-intensive. Task shifting (TS), or delegating tasks performed by physicians to staff with lower-level qualifications, is considered a means of expanding rollout in resource-poor or HRH-limited settings.

Methods: We conducted a systematic literature review. Medline, the Cochrane library, the Social Science Citation Index, and the South African National Health Research Database were searched with the following terms: task shift, balance of care, non-physician clinicians, substitute health care worker, community care givers, primary healthcare teams, cadres, and nurses* HIV.

Results: The field is marked by a paucity and heterogeneity of research. The review yielded 2906 articles; 41 met inclusion criteria, including research from 10 countries in sub-Saharan Africa. The most common intervention studied was the delegation of tasks (especially initiating and monitoring HAART) from doctors to nurses and other NPCs. 5 studies showed increased access to HAART through expanded capacity; 2 concluded TS was cost effective; 9 showed TS-staff offer equal or better quality of care; studies on NPC qualifications, is considered a means of expanding rollout in resource-poor or HRH-limited settings.

Conclusions: Assigning CHWs to HIV-infected pregnant women dramatically improves identification, enrolment into care, and outcomes for HIV-exposed infants. (Presenting author email: deetas518@gmail.com)

WEPE0844
Task shifting: facilities deliver PMTCT scale-up without increases in staff numbers in Zambia

A. Walsh1, P. Ndbani1, J. Simbaya1, P. Dicker1, R. Brugha1,2
1Troyal College of Surgeons in Ireland, Division of Population Health Sciences, Dublin, Ireland, 2University of Zambia, School of Public Health, Lusaka, Zambia

Background: Rapid HIV service scale-up has occurred in Zambia, largely due to support from the Global Fund and PEPFAR. This paper quantifies trends in PMTCT scale-up, staff numbers, workload and staff allocated to PMTCT services.

Methods: Structured questionnaires were administered to facility managers in four districts: (i) one urban and one rural. Data quantifying client/service numbers (2005-07) were extracted from facility registers.

Results: Between 2005 and 2007, numbers of nurse/midwives and other clinical staff remained stagnant across all districts (Table 1). Meanwhile, PMTCT client numbers increased by 34%, with rapid scale up, where median antenatal clinic workloads remained high. Most PMTCT staff also delivered other health services and ratios of all staff delivering PMTCT to nurse/midwives and to all clinical staff increased, predominately outside of Lusaka.

Conclusions: Scale up, especially outside of Lusaka, was achieved through increased task shifting and allocation of existing staff to deliver PMTCT, rather than by appointing new staff. Facility data can be used to demonstrate high and increasing workloads, providing quantitative confirmation of a workforce at risk of burnout. PMTCT funding HIV scale-up continue to fail to enable Zambia to recruit and retain more clinical staff.

WEPE0845
Non-physician clinicians

WEPE0845
Implementation of a nursing model for triage of HIV-positive patients with influenza like illness (ILI) during a pandemic threat of novel swine-origin influenza A (2009 H1N1 influenza)

K. Steffens, A. Radix, J. Dolby, G. Gatterman, G. Mayer, S. Weiss
Callen Lorde Community Health Center, New York, United States

Issues: In April 2009, New York City experienced an outbreak of novel swine-origin influenza A (2009 H1N1 influenza). Callen-Lorde Community Health Center is the largest community-based provider of HIV primary care in New York City. The threat of an influenza pandemic required immediate implementation of measures to limit exposure of to health care providers and susceptible patients to H1N1, allow rapid identification and treatment of affected individuals and provide timely dissemination of information to stakeholders. It was also necessary that interventions not overwhelm the normal day-to-day functioning of the clinic.

Description: Nurses were essential to the emergency response. Measures instituted: training in CDC guidelines for diagnosis, treatment and infection control practices for influenza like illness (ILI) and use of a structured questionnaire to assist with telephone triage. Collaborating with medical providers, nurses designated patients to symptomatic treatment, antiviral treatment, urgent-care appointments or referral to emergency services. Essential was the ability of nurses to accurately differentiate between ILI and conditions such as opportunistic infections, ARV-related adverse effects and immune reconstitution syndrome. Walk-in patients experiencing ILI were isolated, given surgical masks and evaluated following standard protocols. Additional measures included personal protective equipment (N95 masks) and engineering and administrative controls to limit exposures. The nursing department contributed to daily email alerts providing state-wide and national influenza surveillance data as well as updated treatment and infection control guidelines. When the H1N1 vaccine became available in October 2009 a series of nurse-led vaccine clinics were instituted to ensure rapid vaccination of staff and patients.

Lessons learned: Patient calls and walk-ins increased 2-3 fold during the H1N1 epidemic however routine HIV care services were not affected. Highly trained nurses with experience in HIV management were essential to appropriate triage of HIV-positive patients.

Next steps: The clinic will incorporate the specific needs of HIV-positive patients into all emergency preparedness plans.

Presenting author email: swells@callen-lorde.org

Abstract Book Volume 2 | www.aids2010.org
Workforce remuneration, motivation
WEPE0848-WEPE0851

WEPE0848
Personal reflection of experiences as a foundation for providing quality services to the PLHIV in the hospital settings in India
J. Hembrom1, R. Lathannawia1, S. Abraham2, E.R. Dutta1, G. Abraham1, V. Kudar1
1Christian Medical Association of India, Community Health Department, New Delhi, India, 2Christian Medical Association of India, New Delhi, India

Issues: PLHIV continue to experience stigma and discrimination in hospital settings in India in spite of addressing the issues for many years. One reason being extremely high patient-healthcare provider ratio making it difficult to empathize with the problems faced by the PLHIVs.

Description: CMH being a faith-based membership organization with 330 hospitals had taken many steps to increase awareness among member hospitals to provide quality services to PLHIV. A workshop with 8 of the member hospitals on mainstreaming of HIV and AIDS was held at Delhi to analyze staff's own beliefs and values with respect to HIV and AIDS. The methodology used was stigma tree in which the participants introspect about their behavior and attitude. The participants were asked to share their own experience of stigma and discrimination of any reasons. After discussion, the causes of stigma and discrimination for PLHIVs were analyzed and various acts of stigma and discrimination for PLHIVs were identified.

The staffs were able to introspect on the various issues like right of knowledge on protection and fear of infection that challenges the PLHIVs and identified ways like reflecting on their beliefs and values, using the support from administration, awareness programme for all categories of staff etc to extend their services more empathetically to PLHIVs.

Lessons learned: Introspection through stigma tree as opposed to an external negative gap analysis often helps staff in hospitals to deal more efficiently and effectively with the causes and impacts of stigma and discrimination in a hospital.

Next steps: This methodology can be applied to any care providers - faith based or otherwise, to ensure empathized behavior towards every PLHIV visiting the hospital.

Presenting author email: julie.laskar@cmai.org

WEPE0847
E. Osawa1,2, T. Kodama3, E. Kundishora4

Background: In resource-limited settings with the shortage of professional health workers, community and home-based care (CHBC) programs staffed by care facilitators (CFs) play a vital role in caring for the PLWHAs and supporting their families.

Methods: We conducted a cross sectional study in August 2006 to examine the factors influencing motivational outcome and self-assessed performance of CFs in Masvingo Province, Zimbabwe, where Red Cross Society has provided community home-based HIV/AIDS program since 1992. Self-administered questionnaires from 119 CFs were analyzed by chi-square test and multiple linear regression model.

Results: The response rate was 71.7%. The 46.8% of CFs in rural area had worked more than 5 years whilst only 18.5% of CFs in urban area did (p < 0.05). Both the motivational outcome and self assessed performance of CFs were significantly associated with perception toward family and community environment (β = 0.462, SE = 0.092, p < 0.001 and β = 0.496, SE = 0.173, p < 0.001, respectively). Managerial support, like attention from a manager, clear instruction and goals, were significantly associated with the motivational outcome of CFs (β = 0.645, SE = 0.053, p < 0.001), whereas material and technical support, like remuneration and material supply, did not influence them.

Conclusions: From comparison between features of rural and that of urban, it is considered that distribution of employment influences the sustainability of CFs and CFs play big role in rural area with much more critical shortage health professionals rather than in urban area. From the result of multiple liner regression model, firstly CFs might join the activity and perform by expectation from a community rather than that from an organization, and then, be kept motivated by managerial support. These findings suggest that organization need to create the policy consistent with community need and provide clear goal and instruction to improve to motivation and performance of CFs.

Presenting author email: erlosawa@redcross.ac.jp
WEPE0850  
Voices from the front line: health care worker (HCW) - reported stress, motivation and satisfaction at HIV sites in Dar es Salaam, Tanzania  
H. Shiru, M. Garcia, G. Chalamalii, M. Li, C. Hawkins, S. Ismaili,  
W. Hirschhorn, S. Kaaya  
1Muhimbili University of Health and Allied Sciences, Dar City,  
2Harvard School of Public Health (HSPH), Health Care Quality Management, Dar es Salaam,  
Tanzania, United Republic of,  
3Sobus Hopkins School of Medicine, Baltimore, United States,  
4Muhimbili University of Health and Allied Sciences, Dar City,  
5Harvard School of Public Health, Dar es Salaam, Tanzania, United Republic of,  
6Harvard School of Public Health, Global Health, Boston, United States,  
7Northwestern Universities, Chicago, United States,  
8Muhais- 
9Harvard-Dar es Salaam City Council (MDH) HIV/AIDS Care and Treatment Program, Dar Es Salaam, Tanzania, United Republic of,  
10Harvard School of Public Health, Public Health, Boston, United States,  
11Harvard Medical School, Boston, United States,  
12Muhimbili Universities of Health and Allied Sciences, Dar Es Salaam, Tanzania, United Republic of

Background: Shortages of trained HCWs are a major barrier to universal access to HIV care, particularly in sub-Saharan Africa. Stress and low motivation and job satisfaction are some of factors that have been linked with lower HCW retention. We describe HCW-reported stress, satisfaction and motivation in 16 PEPFAR-supported HIV clinics in Dar es Salaam, Tanzania.

Methods: We distributed a self-administered questionnaires to all direct clinical care providers, clinical support staff and management. Principle components analysis was used to develop scales measuring HCW satisfaction, motivation and stress. Hierarchical linear models explored the association of HCW demographics, and site factors with HCWs reported ability to meet the needs of patients, satisfaction, stress and motivation.

Results: 279 (73%) of 382 HCWs responded to the survey (77% direct care provided, 19% management, and 11% support staff; 77% female). The majority of HCWs (68%) reported their work is rewarding and 78% of HCWs felt their jobs were satisfying. HCW's were confident in their skills (93%) and ability to help patients (76%), although fewer (49%) felt motivated to perform well; only 10% reported a high level of stress. Self-reported motivation was lower among direct HCWs (p < 0.05), although no cadre-related difference in stress or confidence was seen. HCWs from health centers reported higher motivation (p < 0.01) and greater ability to help patients (p < 0.01) than HCWs at district hospitals. Age and sex were not associated with ability to meet patients' needs, confidence, stress or motivation.

Conclusions: High levels of HCW-reported job satisfaction and low rates of stress were seen in these ART sites. However HCWs at large sites and direct care roles were more motivated (p < 0.01) and greater ability to help patients (p < 0.01) than HCWs at district hospitals. Age and sex were not associated with ability to meet patients' needs, confidence, stress or motivation. More work is needed to measure HCW stress and motivation and understand underlying causes in order to design effective strategies to address HCW retention in HIV care and treatment clinics.

Presenting author email: neemasių@gmail.com

WEPE0851  
Getting skilled personnel in underserved districts innovatively  
A.S. Nyamwera1, E. Mwonyenda2, N. Ndeki3, Y. Ispuge1, A. Nana1, R. Shetza4, C. Malembeka1  
1Benjamin William Mkapa HIV/AIDS Foundation, Mjawaba Fellows Programme, Dar es Salaam, Tanzania, United Republic of,  
2Benjamin William Mkapa HIV/AIDS Foundation, Chief Executive Officer, Dar es Salaam, Tanzania, United Republic of,  
3Benjamin William Mkapa HIV/AIDS Foundation,(Programmes, Dar es Salaam, Tanzania, United Republic of,  
4Clinical Health Access Initiative,  
5Country Director, Dar es Salaam, Tanzania, United Republic of

Issues: Tanzania has HIV/AIDS prevalence of 5.7%, the health sector is grossly understaffed by 65% and is capable to address 28% of the actual need in country including scaling up care and treatment of HIV/AIDS.

In collaboration with existing staff, a threefold increase from 13,054 to 58,476 enrolled clients and 5,992 to 22,872 clients on antiretroviral drugs has been noted. Mainstreaming of programme staff into the public health service has been an exit strategy of the programme. The project objectives were to improve the sustainability of the work initiated.

A total of forty one (41) Mjawaba fellows have been mainstreamed and among them ten (10) Medical Officers have been appointed to be District Medical Officers in various districts of Tanzania and are among the beneficiary districts of the interventions and is among the severely underserved where skilled staff hesitate to report once posted and is highly populated by low economic and cultural backgrounds.

The programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in hard to reach in underserved districts. The Programme devised an intervention by offering Fellowship to skilled personnel to work in underserved areas. The Programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in 33 hard to reach districts. The programme devised and used an attractive package both non monetary and monetary.

In collaboration with existing staff, a threefold increase from 13,054 to 58,476 enrolled clients and 5,992 to 22,872 clients on antiretroviral drugs has been noted. Mainstreaming of programme staff into the public health service has been an exit strategy of the programme. The project objectives were to improve the sustainability of the work initiated.

A total of forty one (41) Mjawaba fellows have been mainstreamed and among them ten (10) Medical Officers have been appointed to be District Medical Officers in various districts of Tanzania and are among the beneficiary districts of the interventions and is among the severely underserved where skilled staff hesitate to report once posted and is highly populated by low economic and cultural backgrounds.

The programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in 33 hard to reach districts. The programme devised and used an attractive package both non monetary and monetary.

In collaboration with existing staff, a threefold increase from 13,054 to 58,476 enrolled clients and 5,992 to 22,872 clients on antiretroviral drugs has been noted. Mainstreaming of programme staff into the public health service has been an exit strategy of the programme. The project objectives were to improve the sustainability of the work initiated.

A total of forty one (41) Mjawaba fellows have been mainstreamed and among them ten (10) Medical Officers have been appointed to be District Medical Officers in various districts of Tanzania and are among the beneficiary districts of the interventions and is among the severely underserved where skilled staff hesitate to report once posted and is highly populated by low economic and cultural backgrounds.

The programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in 33 hard to reach districts. The programme devised and used an attractive package both non monetary and monetary.

In collaboration with existing staff, a threefold increase from 13,054 to 58,476 enrolled clients and 5,992 to 22,872 clients on antiretroviral drugs has been noted. Mainstreaming of programme staff into the public health service has been an exit strategy of the programme. The project objectives were to improve the sustainability of the work initiated.

A total of forty one (41) Mjawaba fellows have been mainstreamed and among them ten (10) Medical Officers have been appointed to be District Medical Officers in various districts of Tanzania and are among the beneficiary districts of the interventions and is among the severely underserved where skilled staff hesitate to report once posted and is highly populated by low economic and cultural backgrounds.

The programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in 33 hard to reach districts. The programme devised and used an attractive package both non monetary and monetary.

In collaboration with existing staff, a threefold increase from 13,054 to 58,476 enrolled clients and 5,992 to 22,872 clients on antiretroviral drugs has been noted. Mainstreaming of programme staff into the public health service has been an exit strategy of the programme. The project objectives were to improve the sustainability of the work initiated.

A total of forty one (41) Mjawaba fellows have been mainstreamed and among them ten (10) Medical Officers have been appointed to be District Medical Officers in various districts of Tanzania and are among the beneficiary districts of the interventions and is among the severely underserved where skilled staff hesitate to report once posted and is highly populated by low economic and cultural backgrounds.

The programme known as Mjawaba Fellows Programme has recruited 99 skilled personnel to work in 33 hard to reach districts. The programme devised and used an attractive package both non monetary and monetary.
Human resources and health systems
WEPE0854-WEPE0859

WEPE0854
GHI-supported human resources for HIV/AIDS service delivery: the need for sustainable solutions

N. Dhawan, E. Sullivan, K. ole-MoiYoi, R. Weintrob
Bingham & Women’s Hospital, Global Health Delivery Project, Boston, United States; Harvard School of Public Health, Global Health Delivery Project, Boston, United States

Issues: Global Health Initiatives (GHIs) such as PEPFAR and the Global Fund have significantly increased the availability of HIV treatment. In Kenya, while these measures have had a tremendous positive impact on people affected by HIV, the increased demand for HIV/AIDS-related services, and to some extent for general health services, has not been matched with greater support for human resources (HR).

Description: We collected data through an extensive literature review and semi-structured key informant interviews which addressed health system functions and inputs including HR. The 50 key informants were selected for their experiences with PEPFAR, Global Fund, or both. Interviews were recorded and transcribed to facilitate a thematic qualitative analysis approach with an iteratively developed set of codes.

Lessons learned: Despite Kenya’s existing cadre of trained health-workers, a human resource gap persists because the government has been unable to support workers’ salaries. While GHIs have invested in recruiting and training workers for HIV/AIDS-related care has improved service delivery, GHIs support for HIV/AIDS-related positions has also increased. Furthermore, donor funding and reporting requirements have caused workers to migrate from one health area to another. Lastly, the majority of respondents expressed great concern about the sustainability of short-term measures taken by GHIs to improve HR capacity.

Next steps: GHIs operating in Kenya must invest in the health workforce in a sustainable way that supports the health system. We recommend that donors consider other countries’ existing models for supporting human resources. GHIs must work with governments to 1) maintain the short-term, improve coordination among donors to effectively deliver HIV-related services, including drugs, and 2) in the long term, increase alignment with system-wide priorities regarding human resources in order to decrease duplication, to maximize the potential impact of funding, and create a more sustainable effect on Kenya’s health system.

Presenting author email: nayana.dhawan@post.harvard.edu

WEPE0855
Community based education services (COBES): an innovative approach to address human resource shortages in post-conflict Northern Uganda

W. Olaga, D. Seja, L. Cicco, M. Makumbi
NUMAT/GI, Gulu, Uganda

Issues: Shortage of health staff has repercussions on the quality of health service delivery, particularly in resource-constrained countries. In Uganda only 65% of the approved health workers positions are filled and even then there is huge urban/rural disparities. Doctor/patient ratio stands at 1:20,000 against WHO recommendation of 1:439. Northern Uganda districts in particular have failed to attract health workforce of all cadres, especially medical officers.

Description: Our Program collaborated with two public universities in implementing Community-based Education Services (COBES), an innovative model of responding to shortage of health workforce in Northern Uganda. A phased approach was used. Initially, marketing the benefits of the strategy with local authorities as a solution to addressing staff shortages took place. Once consensus was built, the next phase was training of the students’ tutors and supervisors on the principles and objectives of the model. Tutors were drawn from the same health facilities while supervisors were students’ lecturers. Finally, students were deployed to selected health units.

Lessons learned: From 2008 to date, 112 medical students were deployed in four different phases at seven health facilities in northern Uganda. Five health units registered an increase of over 30% in outpatients’ attendance during students’ placement. In one health unit, community mobilisation made by the students themselves more than doubled uptake of HIV testing among pregnant mothers attending antenatal care. Half of the participating students expressed interest in undertaking their internship and work within the region upon graduation.

Next steps: The strategic partnership between local governments, health training institutions and NGO is a good example of public/private partnership model for responding to human resource for health shortages in rural communities. In Northern Uganda, students are deployed to villages which are their communities but also raised the interest of students to work in rural communities, thus providing a promising long-term solution to staff shortage.

Presenting author email: woloya@numatuganda.org

WEPE0856
Patient volume and human resource levels affect attrition from HIV treatment programs in Central Mozambique

B. Lambdin, M. Nickle, A. Stergachis, T. Keesee, J. Hughes, K. Sherman, L. Francisco, N. Sampol, A. Soto
1Health Alliance International, Interationl Implemention Science, Seattle, United States; 2University of Washington, Department of Epidemiology, Seattle, United States; 3University of Washington, Department of Global Health, Seattle, United States; 4University of Washington, Department of Health Services, Seattle, United States; 5University of Washington, Department of Biostatistics, Seattle, United States; 6DPS Sofala, Beira, Mozambique; 7DPS Manica, Chimoio, Mozambique; 8Health Alliance International, Beira, Mozambique; 9Health Alliance International, Durban, Mozambique; 10Health Alliance International, Gaborone, Mozambique

Background: In order to expand ART coverage, the Mozambican Ministry of Health implemented ART-delivery within primary health care clinics in 2006. Despite efforts to scale-up services to meet growing demands, human resource levels are not expanding quickly enough to handle the rapidly increasing patient population which could lead to poor retention in ART programs. We conducted a study to examine the relationship of patient volume and human resource levels with patient attrition from HIV treatment programs.

Methods: Adult (>15 years), ART-naive patients who initiated ART between January 2006 and March 2008 in 18 public sector clinics were included in the study. Cox proportional hazards models with robust variances were used to estimate the association of patient volume, the number of patients per clinician and the number of patients per pharmacy staff with attrition (defined as lost to follow-up or death) from HIV treatment programs, while adjusting for relevant level characteristics.

Results: A total of 13,993 patients from 18 clinics were studied. Of these patients (5,884 (46%) were females and median CD4 count was 155 cells/µL. The overall attrition rate was 6.52 per 100 person-years. After adjusting for patient-level characteristics, patients attending clinics with higher patient volumes (≥500 patients (HR=1.50; p=0.01) and higher number of patients per pharmacy staff (≥500 patients per pharmacy staff (HR=1.54; p<0.001) had a higher risk of attrition from HIV treatment programs.

Conclusions: Patients attending clinics with larger patient volumes and a larger number of patients per pharmacy staff have a higher risk of attrition. As ART-delivery continues to be scaled-up, strategies to relieve the patient burden on human resources need to be addressed as these barriers may lead to better retention and more effective delivery of HIV treatment.

Presenting author email: blambdin@uw.edu

WEPE0857
Estimating the financial cost of physician emigration in Sub-Saharan African countries

C.G. Au-Hengg, R.S. Hogg, I.S.G. Montane, E.J. Mills
1BC Centre for Excellence in HIV/AIDS, Vancouver, Canada; 2Simon Fraser University, Burnaby, Canada; 3University of British Columbia, Faculty of Medicine, Vancouver, Canada; 4University of Ottawa, Faculty of Health Sciences, Ottawa, Canada

Background: The migration of physicians from HIV-burdened African countries to developed nations has a detrimental effect on the delivery of both general and HIV healthcare services. This study estimates the financial cost of domestically educated physicians emigrating from sub-Saharan African countries to developed nations using data gathered from the Globally Accumulated Health Indicator Archive (GAAIA) of publicly accessible health indicators.

Methods: Our analysis estimated the cost of educating a medical doctor (primary, secondary and medical school) compound over a period of 31 years (estimated number of years spent working abroad based on two similar studies). We included data from 7 sub-Saharan African countries with HIV-prevalence ≥3% in 2007 or one or more medical schools. These included Kenya, Malawi, Mozambique, Namibia, South Africa, Uganda and Zambia. Other high prevalence countries (Botswana, Lesotho and Swaziland) were excluded because they did not historically have medical schools. We estimated primary and secondary education cost in year 2005 and medical school costs in 2010. Data on post-graduate medical training was not included. Costs were compounded at current country specific fixed interest rates of 2-7% per annum and are reported in US dollars.

Results: The number of doctors ranged from 2 to 59 per 100,000 population and the number of medical schools ranged from 1 to 9 in each country. The cost of educating a physician was estimated as follows: South Africa: $264,691, Namibia: $51,879, Uganda: $34,929, Kenya: $26,650, Malawi: $14,344, Mozambique: $12,429, and Zambia: $4,256. The estimated loss of investment per physician over 31 years was: South Africa: $2,155,904, Mozambique: $877,994, Namibia: $387,337, Kenya: $120,991, Uganda: $63,222, Malawi: $35,860, Mozambique: $31,072, and Zambia: $17,644.

Conclusions: Our analysis demonstrates that sub-Saharan African nations with medical schools put a substantial investment into educating future physicians. The financial loss to these nations due to physician emigration is staggering.
WEPE0858 Lessons learned on sustainable staffing levels for PMTCT services in Uganda

M. Namubiru1, T. Sripatpana2, E. Bitarakwate1, A. Kebusingye1
1Elizabeth Glaser Pediatric AIDS Foundation, Programs / Medical, Kampala, Uganda, 2Elizabeth Glaser Pediatric AIDS Foundation, Programs / Medical, Los Angeles, United States

Background: Elizabeth Glaser Pediatric AIDS Foundation’s Uganda program supports the national PMTCT program in 27 districts with over 400 sites. They work closely with districts in a participatory approach to develop, manage and monitor PMTCT services. This is to build capacity for comprehensive PMTCT services. The Foundation staff offer guidance to district health managers and health workers develop their HIV care workflows and budgets. The districts identify and prioritize gaps for the Foundation to address. These workflows are integrated into the local government budgets and this promotes program ownership by the districts. Salary support is provided if a district agrees to ultimately absorb the personnel into the local budget.

Methods: We performed a retrospective review of 13 district workflow plan and budgets from 2004-2008. The review included districts that received support for more than 2 years and included the original district designations from 1.

Results: The Foundation provided salary support to 100 staff in 10 out of 13 districts reviewed over five years. Of all supported positions, 68% were for health care personnel including midwives, nurses and lab staff; 23% were for social workers and 9% were for other staff including data clerks and drivers. A total of 75% support staff had been absorbed into the local budgets. Of staff absorbed, 93 % were health care workers, 46% of those not absorbed were social workers, they are not part of the MOH staffing structure.

Conclusions: Working with the districts to develop workflows, staffing levels and coming to a mutual agreement to ensure sustainability of PMTCT services has been a critical lesson learned for the Foundation’s Uganda Program. While not all positions have been absorbed, a greater portion of health care workers critical to the sustainability of ongoing services were included in the district workflows and local budgets.

Presenting author email: mnamubiru@pedaids.org

WEPE0859 Healthcare workforce optimization modeling in Liberia: estimating current staffing levels and future need with limited data

M. Sundaram1, M. Safer2, M. Nowakowski3, J. Brown1
1Clinton Health Access Initiative, Center for Strategic Health Operations Research, 2Clinton Health Access Initiative, Liberia, Country Team, Monrovia, Liberia, 3Clinton Health Access Initiative, Center for Strategic Health Operations Research, Boston, United States, 4Liberia Ministry of Health and Social Welfare, Human Resources, Monrovia, Liberia

Background: Liberia, recovering from years of civil war, suffers from a critical health worker shortage. To address basic health needs, the Ministry of Health and Social Welfare (MOHSW), conducting an evidence-based revision of the human resource policy, has requested the Clinton Health Access Initiative (CHAI) to quantify the current gaps and develop a strategy to meet staffing requirements.

Methods: CHAI, in collaboration with the MOHSW, developed a model to estimate the optimal workforce levels for specified health cadres to enable provision of the Basic Package of Health Services (BPHS). This tool calculates health-worker (HW) needs based on HW requirements for each BPHS activity, the disease incidence from the health management information system (HMIS), and HW productivity information. The tool utilizes this data to determine the number of HWs required for each facility and aggregates to estimate regional and national level HW targets. The tool can also calculate time saved and time task-shifting between health cadres.

Results: The results suggest that Liberia will need to make substantial investment in training HWs to implement the BPHS. With only 72 doctors in the entire country, Liberia needs nearly 1000% more to achieve the optimally calculated doctor-to-patient ratios to meet current demand without task-shifting. The model was also used by MOHSW for the following:

• Prioritization by HW cadre, county, and facility type based on the areas of greatest need.
• National and regional vacancy rates and cost based on HR census data and optimal staffing requirements.
• Site-level detailed staffing requirements that are used by county health teams to prioritize improved and improved staffing allocations.

Conclusions: As the country slowly rebuilds the health sector, quantitative information is vital to appropriate and effective resource allocation. The information attained from this model will be used to guide the MOHSW as they work to prioritize resource allocation.

Presenting author email: msundaram@clintonfoundation.org

WEPE0860 Development and implementation of a student-initiated HIV elective for undergraduate medical students at the University of Toronto

D. Chew1, D. Jaworsky2, J. Thorne2, J. Andarry1, C. Martin1, M. Ho1,2, N. Hoffman1,2, C. Hershaw2, S. Roukot1, M. Fisher1, A. Rachlis1
1University of Toronto Medical School, Preclerkship HIV Elective, Toronto, Canada, 2University of Toronto, Faculty of Medicine, Toronto, Canada, 3Ontario HIV Treatment Network, Toronto, Canada, 4Sunnybrook Health Sciences Centre, Toronto, Canada

Issues: Literature indicates that medical students require more comprehensive training in HIV care. To address this need, medical students at the University of Toronto developed and implemented the Preclerkship HIV Elective (PHE) aimed at increasing HIV knowledge, addressing important issues in HIV care and preparing students to serve affected populations.

Description: The program outline of the PHE was drafted in the summer of 2008 and funded by the Ontario HIV Treatment Network for implementation. After review of the formal undergraduate medical curriculum for existing HIV content, the medical student planning committee developed the PHE in consultation with faculty members, AIDS Service Organizations and community members living with HIV to address the key issues as recommended by stakeholders. Eighteen second-year medical students participated in the inaugural year of the PHE, which included lectures, small group sessions, clinical observerships, community placements, reading assignments, and an HIV counselling and testing workshop.

Lessons learned: Students run initiatives that supplement medical curriculum content and program feedback may be used to advocate for changes in medical curricula. Including stakeholders from the early planning stages helped to build support for the PHE and ensure their involvement during the implementation of the PHE. To encourage student interest in the PHE, non-didactic learning sessions were included, and a certificate of recognition was provided on completion of the elective. Involving student leaders in different years of study is a necessary step to ensure the sustainability. Key factors for success include student leadership and interest, community partnerships, and faculty mentorship.

Next steps: The PHE proved to be a successful collaboration among students, faculty, community members and organizations. Data from program evaluation will be used to explore how to expand PHE programs and increase HIV competencies among medical trainees. Discussions have begun to expand the PHE to other Canadian universities.

Presenting author email: denise.jaworsky@utoronto.ca

WEPE0861 “HELP” HIV/AIDS education for Lithuania program: multidisciplinary case management training and implementation program, Vilnius

J. Culzitas1, M. Whitefield2, R. Sherrer1, S. Capilinskas3, C. Teter4, N. Linskia2, H. Jungova5, J. Privoritien6, R. Krupenkite7
1Project HOPE Global Health, Brussels, Belgium, 2Sheffield Hallam University, Centre for Health and Social Care Research, Sheffield, United Kingdom, 3University of Chicago, Section of Infectious Diseases and Global Health, Chicago, United States, 4Lithuanian AIDS Center, Vilnius, Lithuania, 5Project HOPE, Global Health, Millwood, United States, 6University of Chicago, Midwest AIDS Training and Education Center, United States, 7Project HOPE Czech Republic, Prague, Czech Republic

Issues: While HIV/AIDS care has improved significantly for European patients, the Baltic States have faced a surge in HIV cases since 1997, predominantly among IDUs, prisoners, and other marginalized individuals. Coordination of services across sectors responding to the complex needs of the patients is poor due to the fragmentation of and disconnect between the various levels and disciplines of medical and psychosocial support services.

Description: Project HOPE and the Lithuanian AIDS Center led a 3 year program to build the capacity of local HIV/AIDS health and psychosocial care providers via multidisciplinary networks of medical, nursing and social care professionals to enhance communication and coordination across the boundaries of health and social institutions, governmental and non-governmental sector to improve the quality of life of PLWHA in Lithuania.

Participants in multidisciplinary teams were selected through a 80 hour modular program to learn how to design, build and manage effective care networks organized around care management of the complex needs of PLWHA. 17 selected participants graduated as trainers from an intensive training course to disperse the program throughout Lithuania. Overall 231 health and social workers completed training in 2006-2008 developing 39 unique client projects, addressing specific issues ranging from early case finding to continuity of care and PLWHA support benefiting the approximately 1000 PLWHA of Lithuania.

Lessons learned: Involvement of policy makers, health care, and social care practitioners in multidisciplinary teams has proven instrumental in the development and implementation of case management. The residential setting enabled students to disperse the program throughout Lithuania. Overall 231 health and social workers completed training in 2006-2008 developing 39 unique client projects, addressing specific issues ranging from early case finding to continuity of care and PLWHA support benefiting the approximately 1000 PLWHA of Lithuania.

Presenting author email: jcsilzitas@projecthope.org
WEPE0862  Scaling up local human resource capacity: experience of the Zambian HIV residency program

C. Bootz1,2, D. Patel1,3, S. Lakhia1, A. Kwanju1, K. Bowa1, M. Hossain1,2, S. Schneider1,2,3,
1 University of Maryland School of Medicine, Baltimore, United States, 2 AIDSrelief (PEPFAR) Art Project, Zambia, Lusaka, Zambia, 3 University Teaching Hospital, Medicine, Lusaka, Zambia. 4 Ministry of Health, Lusaka, Zambia, 5 University of Zambia, Lusaka, Zambia, 6 Morgan State University, Baltimore, United States, 7 Living Hope Clinical Foundation, Long Beach, N. Kusu1, H. Shah2, P. Boruett1, L. Gitau1, C. Ouma1, M. Wangai1

Description: Participants receive one year of mentored clinical training in all areas of HIV management, supplemented with over 250 hours of lectures, laboratories, journal clubs, and case discussions. By April 2010, twelve Zambian physicians will have completed the program, with an additional twelve anticipated to enroll yearly thereafter.

Lessons learned: Four participants have completed the course, rating its overall effectiveness 4.7/5. All are engaged in HIV related clinical and training programs in Zambia. Another eight have taken both the pre-course and mid-course exams; their median score increased from 41.3% to 69% (scale: F< 50, C=50-64, B=65-74, A>74) [p=0.0001, paired t-test, STATA® 9.2]. Documenting objective clinical skills improvement has been more difficult. Other challenges included: securing professional and financial incentives for this additional training; recruiting participants; integrating with existing UTH/UNZA training programs; and a start-up cost of 100,000 USD per trainee.

Next steps: The course will be upgraded to an 18-month Master’s in Science program to enhance its research component, increase recruitment, and enable for additional graduates. The addition of two Zambian infectious diseases-trained faculty should aid integration with other training programs. Securing long-term financial support and assessing the impact of the course on patient-level outcomes remain outstanding.

Presenting author email: cbootsa@hiv.umaryland.edu

WEPE0863  Using professional societies to promote rational use of antiretrovirals through continuous education in Kenya’s private and community health sector

N. Kuri1, H. Shah2, P. Boruett1, L. Gitau1, C. Ouma1, M. Wangai1


Issues: Maintaining quality healthcare care requires competency-based continuing education for practitioners. Kenya’s Ministry of Health introduced the continuous professional development program (CPD) for health professionals in 2006. The Pharmacy and Poisons Board introduced a CPD program implemented by the Pharmaceutical Society of Kenya (PSK), the pharmacists’ professional body. Constraints to providing antiretroviral therapy (ART) in private sector and community settings include lack of appropriate training materials, poor dissemination of national guidelines, inability to ensure compliance, and weak linkages between public and private sector practitioners.

Description: To promote appropriate use of antiretrovirals in all settings, MSH/SIPS introduced PSK-led CPD courses to private and community practitioners. In 2008, assessments, a multidisciplinary team developed one day curricula for different cadres. The CPD roll-out started with training regional PSK officials as trainers; subsequently, organizers designed one-day seminars on priority ART topics held on weekends that were facilitated by opinion leaders.

Between January-November 2008, 11 sets of training materials on ART-related topics were developed. From March 2007-December 2009, 7 regions held 39 seminars for over 2,500 practitioners from private hospitals, clinics, pharmacies, and public facilities. Participants included pharmacists, pharmaceutical technologists, doctors, nurses, clinical officers, and people living with HIV and AIDS.

Lessons learned: Professional organizations invited participants to the trainings, which proved a good way to disseminate national ART treatment guidelines, job ads, and lessons learned. Participants received CPD points and certificates of attendance for continuing professional development programs through PSK. The professional nature of PSK and other professional organizations provides a powerful conduit to share information and ideas, offering a weekend program, and the opportunity for sharing experiences and professional development.

Next steps: Include increasing the involvement of professional organizations in strengthening private sector and community-based pharmaceutical systems to maximize this sector’s participation and boost service quality.

WEPE0864  Exploring the human resource capacity development landscape for male circumcision roll-out in four rural districts in Nyanya province in Kenya

P. Perchalski1, G. Dipti1, M. Pavin2
1 EngenderHealth, New York, United States, 2 EngenderHealth, Kisumu, Kenya

Background: The Government of Kenya is moving forward with an ambitious program to rapidly scale-up male circumcision (MC) services. The ongoing migration of doctors and nurses both internally and externally in Kenya continues to affect the availability and quality of existing health services. Recruiting, training and deploying qualified MC providers can therefore be expected to be one of the largest of constraints on MC scale-up efforts, given pre-existing human resource (HR) shortages.

Methods: From May 2008 to August 2009 we undertook a comprehensive assessment of the HR and training needs associated with MC roll-out in 4 rural districts of Nyanya Province. The assessment included: i) 36 in-depth key informant interviews with policy makers, program managers, and community leaders; ii) 3 focus group discussions with health providers; iii) desk review of pertinent national and international policy/programming HR and training documents; and iv) audits of 3 area facilities.

Results: The findings revealed a pre-existing shortfall of 1,667 health workers across health services. In order to achieve estimated district targets of reaching 137,128 uncircumcised men (15-49) by 2013, it will require 280 trained non-dedicated or 68 trained dedicated MC providers. Despite an existing pool of unemployed health providers in Kenya serious barriers continue to persist with respect to rapidly deploying the needed MC providers at the district level.

Conclusions: The rapid expansion of MC services in Nyanya is putting a huge strain on existing human resources. This is likely representative of the HR situation in other provinces scaling-up MC. A national MC human capacity development strategy and resources for recruiting, training and deploying MC providers to support MC scale-up at the provincial and district levels are needed. Additional resources is also required to determine the associated HR and training costs of integrated and stand alone models of delivering MC services, including the use of non-dedicated versus dedicated MC providers.

Presenting author email: godingo@engenderhealth.org

WEPE0865  Training health workers to increase MSM (men who have sex with men) access to adequate services

I. Nita
1 ACCEPT Association, Bucuresti, Romania

Issues: Due to invisibility of lesbian, gay, bisexual and transgender people (LGBT) in Romania and due to absence of formal education related to health issues for gay people, it is not uncommon for HIV counselors and medical professionals to ignore the existence of MSM, to have no knowledge on specific issues related to HIV prevention & treatment, and to regard MSM, or to be uncomfortable discussing homosexual behavior with patients.

On the other hand, most MSM will not inform the HIV counselor or physician about their sexual behavior, either because they are afraid of stigmatization, or because they consider sexual behavior to have no relevance for the provider of a medical service.

Description: We have designed a 2 days workshop for HIV counselors and medical staff, aiming to increase their level of information on issues related to gay health, and to decrease stigmatization of lesbian, gay, bisexual and transgender people (LGBT). In the last year we trained over 400 people - most of them with financial support of GFATM. The poster will present workshop’s structure as well as the outcomes briefcases of each session of the workshop.

Lessons learned: Participants perceive the workshop to be relevant and useful for their work; sometimes the workshop was evaluated as a "life changing experience". Most valued understanding is obtained during "questions and answers" sessions, when participants can relate directly to LGBT volunteers. The effect of this activity on LGBT volunteers seems to be beneficial for their self esteem, no matter what questions or individual attitudes they face. When deconstructing stereotypes, approaching MSM issues integrated in a broader LGBT perspective increases the intervention’s impact.

Next steps: the workshop can be replicated in other countries where the high level of institutionalized homophobia leads to medical and psychological services that ignore MSM needs.

Presenting author email: iuliana_n@accept-mail.ro
Track F > Policy, Law, Human Rights and Political Science

Laws and policies addressing risk and harm reduction

WEPE0867-WEPE0871

**WEPE0867**

**Examples of adequate influence over changes in national policy on harm reduction programs in advanced prisons**

- **Poster**

**P. Lara**

Drug Users, HIV-positive Prisoners

**NIOD Intervening Projects in Prisons of Moldova, Chisinau, Moldova, Republic of**

**Issue:** Moldova is one of the few countries that managed to achieve great successes in HIV prophylaxis and preventing AIDS epidemics in the country. Starting 2005, Moldova has its National program, including legal framework for HR programs.

**Description:** First HR programs in Moldova were implemented in prisons. First pilot project started in 1999. The main problem was to get permission for implementing the pilot projects in prisons, due to absence of legal framework covering HR practices.

We managed to get permission for anonymous research, aiming to establish the fact of drug use in prisons and availability of sterile instruments.

We presented the research results to the Director of Penitentiary Department, and we got the permit to start our pilot project in the prison we made the research in. After one year, based on the results, we were allowed to spread our HR projects to other prisons, including needle exchange and condom distribution. The implemented HR practices proved to be efficient, resulting in significant decrease in new cases of HIV, HCV and HBV.

**Lessons learned:** The state had to admit the efficiency of HR practices. Therefore, there was developed and approved the National policy on HIV/AIDS prophylaxis.

As experts in the domain, we might notice that many countries are willing to implement such projects, but they lack an appropriate legal framework to do so. Our example intends to show that the situation can be changed just by proving that the problem exists and providing ways out of it, adding strong arguments to sustain HR programs.

**Next steps:** We intend to implement the project in pre-trial detention facilities, in order to provide access to our services to those being awaiting trial. We have already started a pilot project in one of the pre-trial facilities and will extend our experience to other isolators.

Presenting author email: lora@company.md

**WEPE0868**

**Supporting harm reduction in Latin America and the Caribbean (LAC)**

- **Poster**

**P. Cypenman**, **M. Day**, **G. Hirnchall**, **R. Mazin**

 Venezuelan Association Civil, Advocacy, Ciudad de Buenos Aires, Argentina, Caribbean Drug Abuse Research Institute, Castries, Saint Lucia, Pan-American Health Organization (PAHO), HIV Unit, Washington, United States

**Issue:** Despite the concept of harm reduction is known to effectively control HIV transmission among drug users, few countries in LAC explicitly support it. Multilateral agencies have provided limited and intermittent support to harm reduction programs in the region. Therefore, actions for expanding access to risk and harm reduction programs and services by drug users and their sexual partners need to be undertaken urgently.

**Description:** In october 2009, PAHO HIV Unit organized an expert consultation on drug users as a priority population for HIV prevention and control activities, with the scope of outlining concrete strategies and approaches to establish, expand, and strengthen risk and harm reduction programs and services in LAC.

As a result, three main activities and products were developed in the following months:

1. Collection and analysis of information on the state of HIV and drug use in LAC, including the identification of gaps in information and responses.
2. Adaptation, expansion and translation into Spanish of the WHO-UNODC-UNAIDS “Technical guide for countries to set targets for universal access to HIV prevention, treatment and care for injecting drug users” to ensure it serves to guide actions in LAC situation, including recommendations for non-injecting drug users.
3. Proposal for the mobilization of financial resources with bilateral organizational and foundations to support the implementation of prevention and harm reduction activities during 2010–2011 in some LAC countries.

Lack of drug use and HIV needs to be addressed in LAC based on a public health and human rights approach. Joint efforts of govern-ments, NGOs and donors with PAHO regional leadership can contribute to harm reduction agenda.

M.S.

A consensus process is being conducted with the participation of key regional actors in order to face the challenges represented by ideological, political, legal, and institutional factors that may hamper the development and maintenance of harm reduction services.

Presenting author email: pabloyerman@intercambios.org.ar

**WEPE0869**

**Eastern Europe and Eurasia: medication-assisted therapy policy assessment findings**

- **Poster**

I. Reshevska, K. Forell, L. Porter, K. Beardslay, P. Lawson

Futures Group, Washington DC, United States

**Background:** Injection drug use drives HIV transmission in Eastern Europe and Eurasia. Failure to treat drug dependence hinders HIV prevention and access to HIV treatment. Sub-optimal policies and inadequate implementation and enforcement of policies present barriers to expanding effective drug treatment programs. Treatment advocates need a way to prioritize and address these barriers for their countries.

**Methods:** USAID Health Policy Initiative developed and tested a policy toolkit to identify policy needs and promising advocacy strategies for expanding medication assisted therapy (MAT). The toolkit provides a structure to prioritize and focus advocacy efforts, establish baselines and monitor changes in public policy and practice related to drug treatment.

**Results:** The toolkit includes an inventory of national policy documents, including legislation, policies, regulations, protocols and operational plans. It also includes structured interviews with key informants, service providers, and clients. The inventory was conducted in Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan; interviews were conducted in Georgia and Kyrgyzstan. Analysis identified common themes in policies; including gaps and conflicts among existing policies; moralizing arguments for and against drug treatment, problems in accessing and maintaining treatment, and potential negative impacts of aggressive external advocacy and donor funding requirements.

**Conclusions:** Implementation of MAT without building the underlying policy framework and political and popular support can reduce the quality, uptake and sustainability of MAT programs. Analysis of policy documents and experiences of key informants, service providers and clients assists advocates and policymakers to pinpoint problems and take steps to improve the policy environment for successful program implementation and scale up. While the tool was designed for Eastern Europe/Eurasia, it is adaptable to other contexts. The modular format allows assessment across the entire policy-to-practice continuum or focus on specific elements from authorization and registration to clinical guidelines and standards of care.

Presenting author email: iaredeley@futuresgroup.com

**WEPE0870**

**Police influence in the development of more effective drug policy**

- **Poster**

M.Z.K. Rahim Khan

Malaysian AIDS Council (MAC), NSEP, Kuala Lumpur, Malaysia

**Issues:** Malaysian AIDS Council (MAC) was established in 1992; umbrella organization for 43 NGOs to address HIV/AIDS related issues; reverse public perception, understanding and acceptance of Harm Reduction, educating the public and engaging law enforcement agencies. The Government policy on drugs is towards zero-tolerance. Malaysia strive to be drug free by 2015. Though into 3 years into NSEP, there need to engage law enforcements for supportive and enabling environment and support HR. Though Harm Reduction is fully financed by the Government. While the Government decreed crimes be reduced by 20 per cent by the end of 2010; as a result constant harassment and detention of IDU jeopardizing the quality, uptake and sustainability of MAT programs. Analysis of policy documents and experiences of key informants, service providers and clients assists advocates and policymakers to pinpoint problems and take steps to improve the policy environment for successful program implementation and scale up. While the tool was designed for Eastern Europe/Eurasia, it is adaptable to other contexts. The modular format allows assessment across the entire policy-to-practice continuum or focus on specific elements from authorization and registration to clinical guidelines and standards of care.

Presenting author email: iaeradeley@futuresgroup.com
Drug treatment courts in action: effectiveness, shortcomings and alternatives

P. Allard
Canadian HIV/AIDS Legal Network, Toronto, Canada

Issues: As drug treatment courts (DTCs) are limited to an abstinence treatment model, they fail to meet the needs of particularly marginalized and vulnerable social groups who have serious drug dependence issues that would be better dealt with through harm reduction treatment models. A criminal law focus often leads to the violation of people's civil rights and liberties, as well as to a hindrance of their health care needs - undermining their right to health.

Description: DTC are judicially-mandated treatment programs – in lieu of incarceration – for people who come in contact with the criminal justice system because of their drug-related criminal activity. The DTC system is based on a therapeutic jurisprudence concept, in which efforts are made to transform the traditional adversarial judicial system into a more restorative, rehabilitative-based process. Some critics have argued that the scarce treatment resources outside the criminal justice system for people motivated to address their addiction are increasingly being occupied by DTC participants, who receive preferential treatment to access treatment and other social services.

Lessons learned: The research will examine how DTC participants have to forego their due process rights in order to obtain help to overcome their addiction. Further, it will make the links between drug use, the transmission of HIV and the necessity of sound, evidence-based drug treatment programs to reduce the prevalence of HIV/AIDS.

Next steps: Although DTCs have been relatively new in phenomenon in Canada, the government seeks to expand DTCs across the country - notwithstanding the lack of evidence demonstrating their effectiveness in addressing drug use and recidivism among participants. It is timely to develop a critical analysis of drug treatment courts and the human rights implications of their practice and procedures as they affect people who are drug dependent.

Presenting author email: pallard@aidslaws.ca

Law enforcement and criminal justice (including prisons, pre-trial detention and other closed settings) WEPE0872-WEPE0879

UNIVERSAL ACCESS FOR PRISONERS IN EASTERN EUROPE AND CENTRAL ASIA

J. van der Meer1, M. Voikl2
1AIDS Foundation East-West (AFEW), Amsterdam, Netherlands, 2AIDS Foundation East-West (AFEW), Russia Regional Office, Moscow, Russian Federation

Issues: HIV prevalence in prisons in Eastern Europe and Central Asia (EECA) is 5-20 times greater than that in the general population. Prisoners and detainees have the right to healthcare equal to that of other citizens of the countries in which they reside. This is in the public interest since prisoners eventually return to their local communities. Therefore, universal access in this high-prevalence population is of paramount importance, both from the epidemiological and rights-based points of view.

Description: A network of Foundation East-West (AFEW) runs programmes for pris- on populations and ex-inmates in 5 EECA countries, involving prison authori- ties, NGOs, community- and faith-based organisations. These programmes provide training to medical and non-medical prison staff, set up peer support interventions, and deliver material support. Training covers pre-release issues and treatment preparedness, while a case management approach ensures continuity of care after release.

Lessons learned: There is political and public support for HIV interventions in the penal systems in EECA. NGOs can play a positive and important role in realising universal access for current and former prisoners. Neglected areas are: HIV-co-infections; interventions in pre-trial detention; as well as the continuity of care upon release; and continuity of care upon detention. Since many inmates are active injecting drug users, there is a compelling need for comprehensive harm reduction services. Prison reforms that reduce incarceration rates would have an enormous positive impact on HIV prevalence and other prison health issues.

Next steps: Successful interventions, especially those with harm reduction components need to be scaled up. Country Co-ordinating Mechanisms in the region should make prison populations a priority when applying for Global Fund Rounds. Further, Universal Access in prison settings deserves prior- ity, plenary attention at conferences such as AIDS2010. Universal access cannot be achieved if the issue of HIV in prisons is underemphasised by govern- ments and donors.

Presenting author email: joost_van_der_meer@afev.org

Demographics and other factors that lead to increased risk of incarceration and re-incarceration among HIV-positive individuals

L. Brinkley-Rubinstein
Metro Public Health Department of Nashville, Nashville, United States

Background: To identify the most appropriate community-level intervention for HIV-positive individuals who have intermixed with the criminal justice system and to assess the risk factors that lead to increased risk of incarceration.

Methods: Secondary data analysis was conducted using two databases that were linked to determine which individuals living in Nashville, TN who were arrested during a five-year period were also HIV-positive. An analysis of all charges incurred was performed and a logistic regression was conducted to evaluate what characteristics lead to increased odds of incarceration and re-incarceration.

Results: Six hundred and thirty eight (638) individuals who were diagnosed as HIV-positive were also incarcerated in jail at least once from 2004 through 2008. A majority of the inmates were African American, males and 26% had a risk factor of injection drug use (IDU). Seventy six percent (76%) were HIV-positive before their first incarceration and 64% were incarcerated more than once. The most common type of charge among the group was public order/disorderly conduct. The subgroups among HIV-positive individuals who were more likely to be incarcerated were: IDU as an HIV risk factor (Adjusted OR (AOR)=2.3, 95% CI: 1.8-2.9); African American race (AOR=2.3, 95% CI: 1.9-2.8); younger age (< 40) at the time of initial HIV diagnosis (AOR=1.4, 95% CI: 1.1-1.6); and initial HIV diagnosis at a public facility (AOR=1.7, 95% CI: 1.4-2.0). IDU risk factor was the only variable that was strongly associ- ated with re-incarceration (AOR: 1.9, 95% CI: 1.2-2.8).

Conclusions: The results of this study underscore the importance of developing and implementing health promotion and community-level HIV prevention strategies for specific subgroups especially those who are most likely to experience incarceration and re-incarceration.

Presenting author email: lauren.rubinstein@nashville.gov

Harm reduction in U.S. prisons: yes we can

M. McLemore1, R. Schleifer2
1Human Rights Watch, Health and Human Rights Division, New York, United States
2M. McLemore, R. Schleifer

Issues: Amid overwhelming resistance in US prisons to harm reduction pro- grams such as condom distribution, needle exchange and medication-assisted therapy such as methadone and buprenorphine for opiate addiction, several model programs are thriving.

Description: We have documented the implementation and success of harm reduction programs in U.S. prisons and jails, including methadone maintenance at Rikers Island in New York City, one of the countries’ largest urban jails; methadone, buprenorphine and overdose prevention for prisoners in Albuquerque, New Mexico; a pilot program for condoms in a medium-security prison in California; pilot methadone programs in the Rhode Island Depart- ment of Corrections; and methadone and buprenorphine programs in the prison system of Puerto Rico. Harm reduction programs have proven to reduce risky behavior such as unprotected sex and injection drug use, thereby lowering the risk of transmission of HIV and Hepatitis C. Prisoner par- ticipants give powerful witness to the potential of these programs to change outlooks, behavior, lives. Initially skeptical prison officials admit the absence of security incidents and, particularly in the case of medication-assisted ther- apy, a marked decrease in drug-seeking behavior; greater adherence to medication regimens for chronic conditions such as HIV and Hepatitis C.

Lessons learned: Numerous models for harm reduction programs in US pris- ons exist. The voices of prisoners whose lives have been changed and those of initially skeptical prison officials can be highlighted to promote awareness that harm reduction is possible and can promote and enhance prison security.

Next steps: Increase awareness among corrections, public health, govern- ment and public that harm reduction programs are thriving in prisons and jails in the US. Examine the numerous models that have been implemented to share best practices for reducing transmission of HIV and Hepatitis C.

Presenting author email: mcllemom@hrw.org

Policy, legal, treatment and HIV response environment for drug users, and the experiences of drug users forced to travel to other countries in India, Nepal, Bangladesh and Pakistan

R.K. Raju
Indian Harm Reduction Network, Advocacy, New Delhi, India

Background: The Global war on drugs are putting drug users into the wrong side of the law in countries. Hence they languish in prisons & forced treatment settings, sinking deeper into dependence, disease and delebitation; having a direct bearing with HIV responses. This report is to (a) analyze the laws, policy and treatment environment and their implication to prevention of BBV & TB (b) assess and disseminate the actual experiences of people being forced to custodial type settings in the name of drug treatment and prisons - for drug dependence

Methods: Literature review and questionnaire survey to 107 current drug users with experiences of being in drug dependence treatment involuntary, and prisons. The questionnaire is mainly quantitative with a few qualitative questions. The survey questionnaire was collected through electronic medium
WEPE0876 HIV in pretrial detention: global review of a preventable crisis

J. Csete1, J. Cohen1, D. Wolfe1, D. van Zyl Smith1, D. Tomasini-Joshi1
1Columbia University, Population and Family Health, New York, United States
2Open Society Institute, New York, United States
Université de Nottingham, Nottingham, United Kingdom

Issues: Pretrial detention (PTD) is that, incarceration of persons who have not been convicted of any crime - is meant to be a measure of last resort and is increasingly used in many countries. About 30% of incarcerated persons globally are pretrial detainees. Risk of HIV transmission and keeping is greater in pretrial detention than among long-term prisoners, where risks are known to be high.

Description: An exhaustive review, focused on developing and transitional countries, of published and grey literature on risks of HIV transmission among pretrial detainees and barriers to access to HIV prevention, treatment and care in PTD.

Lessons learned: HIV-related challenges of the PTD (vs. prison) environment include:
- Poorer capacity in PTD to initiate or sustain key interventions such as antiretroviral therapy, methadone and other opioid therapy, provision of sterile injecting equipment, and provision of condoms, and poorer overall quality of health services.
- Poorer capacity for HIV testing with informed consent and confidentiality.
- Greater risk of sexual violence, coercion and abuse.
- Authorities less inclined to initiate services that require sustained care and support.
- Greater exposure to opportunistic infections due to overcrowding and poor sanitation.
- Less access to peer-based or peer-supported programs than in prison.
- PTD health services often not overseen by health ministries.

Next steps: Most importantly, there is an urgent need to reduce the use of PTD, and health professionals should advocate toward that end. Raising awareness of this neglected locus of HIV risk is also urgently needed, as is opening PTD facilities to greater scrutiny and monitoring. Health professionals have a crucial role to play - as teachers, service-providers, monitors, researchers and advocates.

Presenting author email: j11888@columbia.edu

WEPE0877 Successful HIV prevention, care and treatment in a Haitian prison

J. May1,2*, M. Andrews1, P. Joseph1
1Health through Walls, North Miami, United States
2Armour Correctional Health Services, Miami, United States
3International Corrections and Prison Association, Edinborough, United Kingdom
4GHESKIO/ Well Medical College of Cornell University, Port-au-Prince, Haiti

Issues: In many resource-poor countries with high burdens of HIV infection, care and treatment of prisoners living with HIV/AIDS is very limited. Meanwhile, through the disruption of social networks, economic vulnerability, and gender inequity, incarceration itself contributes to the global burden of HIV. Interventions and resources directed to prison health programs are often inadequate.

Description: Conditions in Haiti’s National Penitentiary had always been harsh with high prevalence of tuberculosis and serious medical needs. The facility intended for 1,200 prisoners held more than 4,300. Until 2009, ARV therapy was not routinely provided to prisoners with HIV/AIDS. Following advocacy and a formal agreement with the Haitian government, an initiative of HIV prevention, care, and treatment in the prison began through a broad collaboration among prison person peer educators provided sensitization and staff received training and resources. In less than one year before the earthquake of January 2010 during which all prisoners fled, 86 prisoners had been identified with HIV and entered into care and treatment.

Lessons learned: A successful program of HIV prevention, care, and treatment is possible within prisons of resource-poor countries.

Next steps: Recovery from the earthquake, rebuild the correctional health care delivery system, and replicate the program to other prisons and countries.

Presenting author email: drjmay@aol.com

WEPE0878 Prisons in India - a challenge for treatment and control of HIV/AIDS

V. Hiremath

Lawyers Collective HIV/AIDS Unit, Mumbai, India

Issues: The treatment of PLHIV in prisons remains one of the biggest challenges in the fight against HIV/AIDS in India, especially in a country where living conditions in jails are appalling. Practices of drug use and unsafe sex between prisoners initiate the spread of the epidemic.

Description: Lawyers Collective HIV/AIDS Unit has been working in some of the jails in Maharashtra since 2006. The experience shows that jail population is extremely vulnerable to HIV/AIDS and its uncontrolled spread. A total number of 8749 prisoners were tested for HIV in Maharashtra in 2009 out of these 229 tested positive and only 59 were put in care.

The conservative attitudes of the Governments whereby they summarily reject the proposals of distribution of clean needles and condoms, and fail to recognize the conjugal rights of prisoners which can play an important role in checking the spread of HIV in prisons.

Lessons learned: Now that the prisoners are being tested, it is found that there are a number of prisoners living with HIV in jails. Hence there is greater need for working towards a system where not only is treatment provided but also steps are taken to curb its spread.

Next steps: Creating atmosphere where we recognize that prisoners living with HIV require special care and treatment and establishing protocols to check the spread of HIV in prisons. To achieve this end it is imperative that Governments are made aware of different methods to treat and control HIV/AIDS epidemic in prisons. Also organizations are allowed to provide legal services for the PLHIV in prisons.

Presenting author email: vijayhiremath@gmail.com

WEPE0879 The impact of compulsory drug treatment centres on the human rights of people who use drugs and the HIV epidemic in Southeast Asia

M. Nougier

International Drug Policy Consortium, London, United Kingdom

Issues: In Cambodia, China, Malaysia and Viet Nam, injecting drug use and the HIV epidemic are intricately related. The approach typically adopted by these governments to tackle drug use has focused for the past decades on the arrest and referral of drug users to compulsory drug treatment centres.

Description: The findings of this desk-based research project were presented in a WHO report ‘Treatment of Compulsive Drug Treatments’ (published in April 2009). Compulsory drug treatment centres relies almost exclusively on abstinence-based detoxification, provide limited healthcare services for the residents, and the treatment, care and are virtually nonexistent. After release from the centres, the relapse rate into drugs reaches between 60 and 100 per cent of the former residents.

Lessons learned: Coercive treatment is ineffective in treating drug dependence, and is responsible for a number of human rights violations (denial of healthcare, cruel and inhumane treatment, forced labour, etc.). Additionally, this practice increases the vulnerability to HIV for a population at high risk as they are denied HIV prevention, treatment and care in the centres. We suggest a way forward within a right-to-health framework. Compliance with international guidelines and the introduction of harm reduction services, including HIV prevention, treatment and care for people who use drugs in Southeast Asia will provide an efficient strategy to tackle both drug dependence and the HIV epidemic.

Next steps: Cambodia, China, Malaysia and Viet Nam have recently started to provide limited harm reduction services to people who use drugs. Implementation of these interventions will provide both evidence and encouragements for further reforms to establish a drug policy that is both respectful of human rights and able to tackle the HIV epidemic in the region.

Presenting author email: mnougier@idpc.net

Child welfare

WEPE0880 Children’s rights and the politics of culture in the two African kingdoms: an assessment of the laws, policies and programmes for children infected and affected by HIV/AIDS in Lesotho and Swaziland

T. Nhengo-Chakarasa1, D. Budlender2
1University of Louvain, University of Cape Town, Faculty of Health Sciences, Cape Town, South Africa
2Community Agency for Social Inquiry, Cape Town, South Africa

Issues: Lesotho and Swaziland have among the highest HIV/AIDS prevalence rates in the world, translating to at least 10,000 and 13,000 children below 15 years vulnerable by the disease respectively. While the circumstances of these children are relatively well documented, the countries’ domestication and implementation of international human rights instruments addressing the needs of these children has never been systematically assessed. This paper presents...
Social assistance and welfare
WEPE0881
Caring and supporting people living with HIV/AIDS with the Malawi social cash transfer
C. Miller
Bethel University School of Public Health, International Health, Boston, United States

Background: People living with HIV/AIDS (PLWHA) in resource poor countries have a variety of needs, beyond ARVs, including complementary health-care, nutrition, economic support, and assistance in mitigating the impact on their families. Recent studies have documented the financial constraints facing PLWHA. HIV/AIDS negatively impacts the household economic situation. Also, studies confirm that household poverty among PLWHA is linked to the global HIV/AIDS crisis. To mitigate these impacts, PLWHA and that poverty reduction and HIV/AIDS programming must be integrated. Thus, the Malawian Government implemented the Social Cash Transfer Scheme (SCT). Within a larger longitudinal impact evaluation study, we conducted 24 qualitative interviews among PLWHA receiving the SCT in order to examine their needs and the ability of the SCT play a role in the care and support of their households. We systematically analyzed the qualitative transcripts, conducting a content analysis to identify salient themes and patterns of ideas related to study topics.

Results: Respondents provided detailed explanations of impacts related to the SCT. Specifically, among respondents, the following personal impacts were found: improvements in personal health (10/24); improved ability to obtain ARVs (9/24), better personal nutrition and food security (17/24), ability to better fulfill education costs for children (18/24), and organize 5 pilot workshops (82 participants) where migrants can (1) share their own experiences and identify strategies to effectively secure their right to residency and to health-care (2) empower themselves as leading actors of migrant people living with HIV/AIDS in France. This included specifically, how to concretely benefit from:

- the 1998 to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin;
- the right to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin;
- the right to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin;
- the right to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin;
- the right to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin.

Next steps: In parallel with wider implementation of these workshop in France, the NGOs AIDES and the RAAC-SIDA network committed to develop of the capacities of migrants in France to effectively use their right to health-care by:

- organizing 5 pilot workshops (82 participants) where migrants can (1) share their own experiences and identify strategies to effectively secure their right to residency and to health-care (2) empower themselves as leading actors of migrant people living with HIV/AIDS in France.
- to disseminate a facilitation guide on how to organize such workshops
- to share via a guidebook a summary of key French laws on health and residency status guidelines that illustrate with testimonies by workshop participants.

Lessons learned: Enabling people to become autonomous in solving legal challenges has multiple, long-term, beneficial effects. This included for instance:

- Individual steps taken to improve one’s quality of care (such as changing medical practitioner or gynecologist)
- Long term commitment in helping one another (example: a participant now provides support to fellow migrants facing difficulties with securing long term residency status)

Laws and policies on immigration and travel
WEPE0882-WEPE0886
WEPE0882
HIV-specific restrictions on entry and residence in Europe: a source of discrimination and a challenge to demonstrate political leadership
P. Wiessner1,2, K. Lemmen3, D.H.-U. Haery3, M. Nyamber4,5
1Deutsche AIDS Hilfe e.V., Berlin, Germany, 2European AIDS Treatment Group (EATG), Brussels, Belgium, 3Global Network of People Living with HIV (GNP+), Amsterdam, Netherlands

Issues: The fact that an EU country is chosen as the host of the IAC is a great honour for that country. The conference provides chances to demonstrate leadership by reinforcing the commitment in the fight against discrimination and stigmatization. The conference is set to assess the impact of HIV in the EU region and has potential to be a platform for the EU to address the HIV/AIDS crisis as venue for AIDS 2012 after the removal of US travel restrictions. The new action plan of the EU commission to combat HIV AIDS for the abolishment of travel and residence restrictions in Europe. Is the European region a safe haven for the conference? The EU conference is a prime venue for foreign affairs a questionnaire was send to German embassies of 197 countries, including all countries in the EU region. Data from the EU region was extracted and analyzed.

Lessons learned: The study revealed, for both countries, limited domestication of the relevant human rights treaties and obsolete domestic legislation which does not state up to the emerging realities for children made vulnerable. HIV/AIDS negatively impacts the right to health/care, social security and adequate standard of living. The countries’ dual legal systems present problems which are aggravated by the lack of legislative guidance for the resolution of culturally sensitive issues faced by children affected by HIV/AIDS, such as, abuse, forced marriages and inheritance. Disagreements on these matters in these highly traditional countries have thwarted (law and policy) reform. While their policies are strong in design, planning, targeting and gender integration, their interventions on OVC and gender are generally uncoordinated.

Conclusions: The research draws attention to the need for all countries and the international bodies responsible for the various conventions to consider ways of monitoring the instrument’s domestication after ratification and how the countries may be encouraged to do so.

Presenting author email: tendai.chakaria@uct.ac.za

WEPE0883
Improving access to health rights for migrants in France: effects of a community-based approach
1AIDES, Pantin, France, 2RAAC-SIDA, Pantin, France, 3AIDES, Bordeaux, France, 4AIDES, Marseille, France, 5AIDES, Lille, France

Issues: Knowing better our legal rights as migrants living in France came out as a top priority shared by the 120 participants to our 2005 national meeting of migrant people living with HIV/AIDS in France. This included specifically, how to concretely benefit from:

- the 1998 to residency status and to health-care for migrants affected by a serious illness that cannot be adequately treated in the country of origin;
- the legal right to family reunification;
- health-care and related social services.

Description: The NGO’s AIDES and the RAAC-SIDA network committed to develop of the capacities of migrants in France to effectively use their right to health-care by:

- organizing 5 pilot workshops (82 participants) where migrants can (1) share their own experiences and identify strategies to effectively secure their right to residency and to health-care (2) empower themselves as leading actors of migrant people living with HIV/AIDS in France.
- to disseminate a facilitation guide on how to organize such workshops
- to share via a guidebook a summary of key French laws on health and residency status guidelines that illustrate with testimonies by workshop participants.

Lessons learned: Enabling people to become autonomous in solving legal challenges has multiple, long-term, beneficial effects. This included for instance:

- Individual steps taken to improve one’s quality of care (such as changing medical practitioner or gynecologist)
- Long term commitment in helping one another (example: a participant now provides support to fellow migrants facing difficulties with securing long term residency status)

Next steps: In parallel with wider implementation of these workshop in France, the NGOs AIDES, ODSE and the RAAC-SIDA have designed an observatory of current French administrative practices revealed by workshop participants. This observatory is a strategic tool to develop sustained advocacy efforts to improve access to essential rights and to quality health care for migrants in France.

Presenting author email: peter-wiessner@t-online.de

WEPE0884
The past, present and future of HIV-related travel restrictions in the United States and the Republic of Korea
K. Oh
Asia Catalyst, Brooklyn, United States

Issues: Many countries have pledged to achieve universal access to HIV prevention, treatment and care by 2010. In light thereof, there has been much praise of the early-2010 announcements that the United States and the Republic of Korea had lifted their respective HIV-related travel restrictions. However, the purported legal and policy changes actually implemented are insufficient to achieve the stated purposes of universal access and freedom of movement of people living with HIV/AIDS (PLWHA). The US and South Korean representations represent ways in which countries have publicly committed to ending discrimination against people living with HIV/AIDS while preserving discriminatory barriers and treatment.

Description: This research examines the legislative and policy histories of the laws and regulations constituting the countries’ respective HIV travel bans. In both countries, the “travel ban” is actually comprised of the intersection of separate but related immigration, public health, anti-discrimination and civil/human rights laws and policies. Examining these legal frameworks provides a more accurate valuation of the nature and reach of the countries’ recent announcements and indicates additional changes needed to enable freedom of movement of PLWHA.
WEPE0885
Repealing HIV related travel restrictions in Armenia: achievements and gaps
L. Nanushyan, A. Babloyan
National Assembly of the Republic of Armenia, Yerevan, Armenia

Issues: Armenia remains one of only 12 countries (including Brunei, China, Iraq, Qatar, South Korea, Libya, Moldova, Oman, the Russian Federation, Saudi Arabia, and Sudan) that bar people with HIV or AIDS from visiting or immigrating to the country by the law. The enforcement of such restrictions violates human rights and curtails important life activities of people living with HIV. 

Description: Because the HIV travel bans are unnecessary and harmful to public health, and the law doesn’t meet the current requirements in the fight against HIV/AIDS and protection of human rights, draft legislation on repealing travel restrictions of HIV-positive foreigners entering the country and their deportation from the country has been developed. The draft law was aimed to either strengthen legal reforms and safeguard human freedoms, dignity, and rights in accordance with international guidelines for effective responses to HIV. 

Methods: The research, advocacy, research and education empowered the National Assembly of the Republic of Armenia to adopt the new legislation.

Lessons learned: Law can play its most significant role by establishing a supportive and enabling environment for HIV/AIDS prevention and care programs, which are implemented by government and by non-government partners. Many aspects of country’s laws should assure that it is supportive of a response to HIV/AIDS: a) of effective in achieving public health goals, b) reduces vulnerability to HIV/AIDS, c) protects people from the negative impact of HIV/AIDS, including discrimination against people who are living with HIV/AIDS.

Next steps: The review and amendments of the sublegislate acts is necessary in order to assure final repealing of ban of travel restrictions in Armenia, which can be done in collaboration with UN organizations and other stakeholders. The legislation may be adapted for law reform advocacy in other countries where such bans exist.

WEPE0886
Immigrant sexuality: perceptions of sexual rights of migrants in transit to the U.S.
R.S. Khalid Perea, C. Infante Xihilli, M. Caballero Garcia, L. Campero Cuenca
Instituto Nacional de Salud Pública de México, Centro de Investigación en Sistemas de Salud, Cuernavaca, Mexico

Background: Mexico, has given priority to health promotion and HIV prevention among migrant populations in transit to the United States (US), however, the majority of strategies lack of a comprehensive framework on human and sexual rights. To better understand certain aspects of migrant sexuality and opportunities of resistance, experiences and possibilities of resistance in situations of sexual exploitation, coercion, sexual abuse, and access to sexual health care in transit.

Results: Along their journey immigrants may have to deal with sexual coercion, exploitation, survival sex, and sex in exchange of money, goods and protection. Immigrants’ self-perception of being “illegal” makes them to assume that the risks they encounter are part of their destiny and determined by “god’s will”. There are differences of how men in comparison with women perceive the benefits of antenatal testing more important than choice, though people may increasingly avoid government hospitals for antenatal services to escape what they perceive as a mandatory testing requirement.

Conclusions: Although it is both international and Government of Malawi policy that pregnant women be informed of their right to refuse testing, our results show that rural Malawians do not perceive routine testing as a choice, but rather as compulsory to receive antenatal care. Many consider the benefits of antenatal testing more important than choice, though people may increasingly avoid government hospitals for antenatal services to escape what they perceive as a mandatory testing requirement.

WEPE0887
An offer you can’t refuse? Provider-initiated HIV testing in antenatal clinics in rural Malawi
N. Angotti1, K. Yi Dionne2, L. Gaydosh3
1University of Texas at Austin, Department of Sociology, Population Research Center, Austin, United States, 2University of California at Los Angeles, Department of Political Science, California Center for Population Research, Los Angeles, United States, 3Princeton University, Department of Sociology, Office of Population Research, Princeton, United States

Background: Routine, provider-initiated testing (“opt-out”) is intended to advance the public health goal of promoting widespread testing, while respecting human rights concerns by keeping the choice to be tested with the individual. This study aims to understand local perceptions and social consequences of the implementation of routine testing of pregnant women in antenatal clinics in rural Malawi. By focusing on the intended beneficiaries of routine testing policies, we offer evidence to those who debate the potential advantages and disadvantages of routine testing in high-prevalence countries.

Methods: Malawi, with an estimated prevalence of 12%, has implemented routine testing of pregnant women. Our interest is in local perceptions of this policy, we utilize qualitative methods: 1. semi-structured interviews with rural Malawians tested for HIV during antenatal visits; 2. focus group discussions capturing reactions to HIV testing in antenatal clinics; and 3. observational field journals documenting informal conversations in local social networks about HIV testing.

Results: Our data show that rural Malawians perceive routine testing of pregnant women as compulsory to receive antenatal care. Many consider the benefits of antenatal testing more important than choice, though people may increasingly avoid government hospitals for antenatal services to escape what they perceive as a mandatory testing requirement.

Conclusions: Although it is both international and Government of Malawi policy that pregnant women be informed of their right to refuse testing, our results show that rural Malawians do not perceive routine testing as a choice, but rather as compulsory to receive antenatal care. Many consider the benefits of antenatal testing more important than choice, though people may increasingly avoid government hospitals for antenatal services to escape what they perceive as a mandatory testing requirement.

WEPE0888
HIV-based stigma and discriminations in the health settings in Morocco: lessons from a survey among 133 PLWH
N. Raffi1, M. Ababou2, H. Himinch3, M. Mellouk4
1ALCS, Association for the Fight against AIDS, Marrakech, Morocco, 2Université de Fès, Sociologie, Fès, Morocco, 3ALCS, Association for the Fight against AIDS, Casablanca, Morocco

Stigma and discrimination constitute a violation of the rights of people infected and affected by HIV. They are also a major obstacle to prevention, treatment and care efforts. The moroccan organization ALCS carried out a survey in 2007 in order to identify the different forms of discriminations faced by PLWHA in various settings, including health care units.

The survey was conducted among 133 PLWH from the five cities of Morocco having a specialized HIV treatment center. The study included both a quantitative (102 questionnaires) and a qualitative aspect (31 interviews). The questions focused on the origin, frequency and nature of discriminations.

Discrimination in the health settings remains the most important: 40% of discrimination cases reported by the respondents. Women are more exposed to discrimination. 15% experienced delays in access to care and 50% had their HIV status disclosed by care providers.

However, the rate of discrimination is lower in the HIV specialized treatment centers (poles of excellence and referral centers). 50% of respondents reported being denied treatment, care or medical consultation because of the HIV status. 15% experienced delays in access to care and 50% had their HIV status disclosed by care providers.

Despite efforts in training health care providers during the last decade, discrimination is still very common in the environment of care. The issue of stigma and discrimination must be integrated into the national strategic planning, funding and programming, as part of a comprehensive plan that addresses the root causes of stigma and that the main concerns of affected populations.

Presenting author email: nanotti@parc.uctex.edu
WEPE0889
Developing and implementing national policy in Haiti for improved patient privacy and HIV case reporting

G. Meredith
National Alliance of State and Territorial AIDS Directors, Global Program, Washington, United States

Issues: In 2003, the government of Haiti and the Ministry of Health (MSH) began working with NASTAD and other international partners to evaluate, re-design, and implement a new HIV/AIDS Case Surveillance System. The assessment and pilot phases made it apparent that policy and/or law mandating infectious disease reporting would be critical to the system’s success, and that patient privacy and human rights must be protected throughout the HIV testing, reporting, and treatment and care process.

Description: NASTAD worked with the MSH and their legal team to identify existing laws or precedents, and undertook an assessment of need and proposed solutions with key stakeholders. Subsequently, two documents were created and implemented: national policy to mandate HIV case reporting, and a national notice to all health care settings to inform practitioners of the policy and expectations. NASTAD created training modules covering patient privacy and patient record confidentiality, and over 500 health care workers in Haiti covered over 90% of all HIV sites. In addition, NASTAD developed patient informed consent form for HIV testing, patient record confidentiality policy, provider confidentiality statement forms, HIV surveillance data sharing policy, and HIV surveillance data request forms.

Lessons learned:
- Health care workers are interested in the notions of patient privacy and record confidentiality but historically didn’t have the knowledge or tools to ensure them.
- The implementation of mandated HIV case reporting has enabled buy-in from implementing partners, and significantly improved the completeness of case reporting, but without reporting legislation, complete and comprehensive reporting will never occur.

Next steps: NASTAD continues partnership with the MSH, reinforcing the work that has been done to date, and expanding collaboration to general infectious disease reporting; through this process, NASTAD is optimistic that mandated infectious disease reporting law will be drafted and proposed for codification into law.

Presenting author email: gmeredith@nastad.org

WEPE0890
Dying to tell: how HIV treatment programmes in rural South Africa fail

B. van Wyk1, F. Larkin2
1University of the Western Cape, School of Public Health, Bellville, South Africa, 2National University of Ireland, Maynooth, Maynooth, Ireland

Background: The Western Cape Province has been a fore-runner in the rollout of antiretroviral treatment (ART) since 2003, and is widely held as a model for the rest of South Africa to follow. Despite this, barriers to access and adherence to ART have evolved to issues of major concern in the province. Such barriers, much like the diseases being treated, are the result of the complex interweaving of political, economic, social-cultural, gender, and biological factors.

Methods: An in-depth ethnographic study was conducted in three settings in the West Coast district in South Africa. Sixty patients who were on ART in public health care settings were recruited into the study. In addition, key informant interviews were conducted with health workers, counselors, social workers, and various cadres of community-based workers. This analysis follows the case of Henry, an ART patient who died of AIDS. Data were collected from both structured interviews with Henry, his partner and family members (one son and two daughters), his physician and nurse at the health centre, the home-based care supporter and adherent counsellor.

Results: Several systemic factors conspired to bring about treatment failure. From a health services perspective, Henry accessed ART too late. As a patient, Henry had several chronic conditions, which overloaded his pill-burden. Henry was poor and unable to access a welfare grant despite several efforts. The much needed bridging capital from care providers was absent. Thus his nutritional status deteriorated and bedeviled personal efforts to comply with treatment regime. Though having children who were capable of supporting him, this much needed bonding capital was not forthcoming. The presence of the researcher brought linking capital, which energised his support systems, albeit too late to reverse his health decline.

Conclusions: The social context of HIV patients needs to be addressed as well as treatment needs, to improve health and survival.

Presenting author email: bvanwyk@uw.ac.za

WEPE0891
Family planning and HIV integration: have we reached the tipping point?

B. Wicher1, W. Cates1
1Family Health International, Technical Support and Research Utilization, Durham, United States

Issues: Broad international consensus exists that linking sexual and reproductive health (SRH) and HIV policies and programs is essential for meeting international development goals, including the MDGs. Integrating HIV and family planning (FP) programs, in particular, is crucial given that contraception to prevent unintended pregnancies among HIV-positive women is a proven, cost-effective strategy for averting vertical HIV transmission. Despite this support, integration goals have not been effectively translated into practice. Rates of unintended pregnancies remain high in women with HIV, and FP interventions have been underutilized in HIV programs. However, progress in overcoming obstacles to these essential linkages is emerging.

Description: We review recent milestones in FP/HIV integration policy and practice and discuss how these developments provide important, scalable opportunities for preventing vertical transmission.

Lessons learned: Unprecedented opportunities exist to implement and evaluate efforts to link FP and HIV programs, and better address the comprehensive SRH needs of women. First, preventing HIV and averting unintended pregnancies are two of the four pillars of President Obama’s Global Health Initiative, and integration is a cross-cutting principle. Second, in PEPFAR’s new five-year strategy, expanding integration of HIV and FP services is a stated priority. Third, integrating vertical programs into a comprehensive approach is central to health systems strengthening, another global health priority. Fourth, new research published in an AIDS supplement on FP and HIV, including a rigorous Cochrane review, has greatly expanded our technical knowledge of how the FP and HIV fields are related and how they can be better integrated in practice.

Next steps: Public health officials must capitalize on new opportunities to link SRH and HIV programs by prioritizing FP/HIV integration in proposals to PEPFAR and other HIV donors, using new evidence to inform integration programming efforts, and conducting research to expand the evidence base of FP/HIV integration best practices.

Presenting author email: rwicher@fhi.org

WEPE0892
Lack of access to gynecological services for HIV+ women in rural areas of Odessa region, Ukraine: causes and solutions

I. Zverkova
Fifth of Mercy, Odessa, Ukraine

Objective: The research is aimed at identification of the factors, which cause the limited access to gynecological services for HIV-positive women in rural maternity houses in Odessa region (Ukraine).

Methods: In 2008-2009, the author interviewed 100 HIV-positive pregnant women using a specially developed questionnaire. Also for additional information health care workers in every maternity house were interviewed. Interactive training methods of health care workers were used in order to increase their awareness in HIV/AIDS issues, post-exposure prophylaxis and HIV/AIDS legislation.

Problem: HIV-positive women living in rural area of Odessa region face the problem of access to timely and quality health care in local maternity houses.

Outcomes: The survey identified the following factors, which cause the lack of access to gynecological services for HIV-positive women and poor quality services. * 48% of health care workers do not have elementary knowledge on HIV/AIDS and legislation of Ukraine related to HIV/AIDS issues; * 26% of pregnant women received recommendations from gynaecologists to have an abortion; * 34% of women with HIV were refused in provision of health care services in their towns with the referral to the regional clinic; * 60% of women had to pay for delivery, which is a strict violation of the laws of Ukraine. * 25 % of women were not prescribed ARV-therapy; * 30% of women suffered violation of confidentiality.

Conclusions: HIV+ people in rural areas of Ukraine still do not have proper access to services and their human rights are often violated. The survey results demonstrated an urgent need in HIV/AIDS education of health care workers of rural maternity houses.

Presenting author email: zverkova@list.ru
WEPE0893

Documenting violations of HIV-positive women’s sexual and reproductive rights in Southern Africa
P. Patel
Southern Africa Litigation Centre, Johannesburg, South Africa

Issues: There is little documentation on the nature and breadth of violations of the sexual and reproductive rights (SRHR) of HIV-positive women in southern Africa. The particular nature of SRHR violations facing HIV-positive women differ from those of non-HIV-positive women and are intricately linked with the entrenched stigma and discrimination against women living with HIV. In the past two years, a number of such violations have come to light much to the surprise of local and regional HIV advocacy communities, including the reported coerced sterilization of HIV-positive women in Namibia. Given that, a need was identified to proactively document SRHR violations throughout the region.

Description: For the last year, initial research aimed specifically at documenting SRHR violations of HIV-positive women has been undertaken in Zambia, Botswana and Swaziland. Working with local HIV-positive women’s rights organizations, the research team met with dozens of HIV-positive women’s support groups in urban and rural areas and conducted a number of in-depth individual interviews. Violations documented include: severe discrimination and mistreatment while trying to obtain medical services at public health facilities; both explicit and implicit discrimination by medical personnel from getting pregnant; and obstacles to accessing contraception beyond condoms.

Lessons learned: Documenting violations of HIV-positive women’s SRHR requires significant monetary and human resources. Much of the stigma and discrimination facing HIV-positive women has been internalized. This combined with minimal awareness of their SRHR means most HIV-positive women do not identify mistreatment as a rights violation and thus do not report it. By focusing specifically on the SRHR of HIV-positive women, many of these violations will never come to light.

Next steps: Work on such research needs to be continued throughout the region and efforts need to be undertaken to ensure an end to such violations.

Presenting author email: pritty@sal.org.za

WEPE0894

WSW, lesbian and bisexual women and HIV prevention in the global South
B. Langen1, V. Talits2, J. Swartz2
1Schärer, International Projects, Amsterdam, Netherlands, 2Open Society Initiative for Southern Africa, Johannesburg, South Africa

Issues: Despite the yet insufficient scientific evidence to show that sex between women does present a risk for HIV transmission, there are growing numbers of women who have sex with women (WSW) who are both vulnerable to, and living with HIV, certainly in countries with a generalized epidemic. Voluntary or forced sex with a man, drug use and gender/sexuality identity based violence are all modes of transmission as well.

‘Rights here and rights now’ holds true for the sexual, physical and mental health rights of bisexual and lesbian women. In practice limited attention is paid to their health. WSW remain largely under the radar of antiretroviral clinics. WSW are less likely to go for HIV testing, STI screening and pap smears. Lesbian, especially butch lesbians are more likely to be stigmatized in society as a whole and in the health care system specifically.

Description: Participative research by our partners has shown the multitude of issues WSW face: voluntary and coerced sex, and STIs which can result in cervical cancer or infertility, psychosocial problems due to minority stress, violence in intimate relationships, excessive substance use. It is not enough to hope that needs of WSW are met through programs for female sex workers, people using drugs or general ‘women in intervention’. Hence they are not.

Lessons learned: With support from Schärer several partners have implemented a programme focusing on WSW. The lessons learned of 3 programs: providing services free from judgment and stigma, especially for PLWHA; promote informed choice about all available prevention, treatment, and care methods; avoid coercion; ensure equal access regardless of age, race, class, gender, sexuality, HIV status, profession; offer high-quality care; and integrate care in one location or through seamless referral. This framework also ensures a life-cycle approach to WSW.

Next steps: The framework has been distributed via CHANGE’s report “In-vesting in Reproductive Justice for All: Toward a U.S. Foreign Policy on Comprehensive Sexual and Reproductive Health and Rights.” Researchers, however, are soliciting feedback on the framework from international stakeholders and will use this information to present recommendations to the Obama Administration for its Global Health Strategy.

Presenting author email: kwhipkey@genderhealth.org

WEPE0895

Social cultural customs and practices that accelerate HIV and AIDS related stigma and discrimination and hindering women and girls to access widely accepted HIV/AIDS prevention and management in Handeni District, Tanzania, Tanzania
S. Mulungu
Handeni AIDS Working Group, Management, Tanga, Tanzania, United Republic of

Issues: To determine Social cultural customs and practices that accelerate HIV and AIDS related stigma and discrimination and hindering women and girls to access widely accepted HIV/AIDS prevention and management in Handeni District, Tanga, Tanzania.

Description: They interviewed 205 people (men women and girls) in six villages, 30 key informants (War executive officers, Counsellors, teachers, health care workers), 30 health service providers, religious representatives, youths and elders living with HIV etc. Also there was unstructured interviews and observation. A total of 6 Focus group discussion sessions were conducted with proportional participants of 50 Females to 25 males. One round table discussion done with district multi-sectoral AIDS committee and community leaders (40 people attended). Total people studied constitute 1% of the population.

Lessons learned: Inadequate ignorance and inability to pay for health care has remained on the hand of women but it is men who decide the hand of fate for treatment or information, 68% of women said that the decision making on health care and seeking information is under the control of men. Older men have strong control over power based on traditional culture and taboos. Men have been granted with abundance power to dominate all females’ issues, women involvement in decision making either on reproductive or SRHR issues. sail level is prioritized and if at all they do their ideas gets influenced by men. High level of cross cultural and transactional sex, (mentioned by 92% of girls and 79% of men)

Next steps: 1. Governments and CSOs must take concrete steps to increase public awareness about HIV and AIDS to eradicate stigma and discrimination against women/girls for access of services.
2. The enactment and enforcement of legislation and regulations including statutory and customary laws to eliminate discrimination against women and girls access prevention and care services. Empowering women economically and in decision making.

Presenting author email: dsa.mtulu@yahoo.co.uk

WEPE0896

A framework for comprehensive approaches to reproductive health and rights, including HIV/AIDS
S. Sippell, M.B. Hastings, K. Whitsel
Center for Health and Gender Equity (CHANGE), Washington, United States

Issues: The importance of comprehensive sexual and reproductive health and rights (SRHR), which includes HIV/AIDS, has been reaffirmed by the international community, from the International Conference on Population and Development to the Millennium Development Goals. However, a user-based framework for comprehensive SRHR that is not a mere listing of services has not been fully explored.

Description: Researchers studied the benefits of and challenges to comprehensive, rights-based SRHR care in the Dominican Republic, Botswana, and Ethiopia. Researchers paid particular attention to the SRHR needs of women living with HIV. Based upon field interviews and literature consultations, CHANGE developed a framework for achieving comprehensive SRHR that examines the combination of services, programs, referral systems, and sets of rights protections that people need to achieve optimum sexual and reproductive health.

Lessons learned: CHANGE’s framework for achieving comprehensive SRHR incorporates three essential components: family planning, sexual health, including HIV/AIDS; and maternal health. Services should be promoted within programs that are user-centered and participatory; provide services free from judgment and stigma, especially for PLWHA; promote informed choice about all available prevention, treatment, and care methods; avoid coercion; ensure equal access regardless of age, race, class, gender, sexuality, HIV status, profession; offer high-quality care; and integrate care in one location or through seamless referral. This framework also ensures a life-cycle approach to WSW.

Next steps: This framework has been distributed via CHANGE’s report “Investing in Reproductive Justice for All: Toward a U.S. Foreign Policy on Comprehensive Sexual and Reproductive Health and Rights.” Researchers, however, are soliciting feedback on the framework from international stakeholders and will use this information to present recommendations to the Obama Administration for its Global Health Strategy.

Presenting author email: kwhipkey@genderhealth.org

WEPE0897

Women IDUs in Kyrgyzstan: barriers to HIV prevention and care
I. Ermojueva
NGO ‘Asteria’, Bishkek, Kyrgyzstan

Issues: A study, conducted by our organization in 2008, demonstrated that up to 20% of women IDUs in Kyrgyzstan could be infected with HIV, which is almost twice the rate of HIV-infection among IDUs in the country. Women IDUs in Kyrgyzstan are not covered by most prevention programs and face significant barriers in accessing reproductive health, medical, and social services.

Description: Astaria is an organization that was started by women IDUs. In 2008, we conducted in-depth interviews with 73 women IDUs to highlight the main issues they face in accessing medical, social and legal services. We found that women experienced gruesome violence at the hands of relatives and police, lacked negotiating skills when bartering sexual services for drugs or money, had high rates of HIV and HCV infection, and experienced difficulties in accessing reproductive health services and substance abuse treatment due to lack of knowledge and stigma.

Lessons learned: We presented the results of our findings to government officials and partner organizations and established firm collaboration with government reproductive health and narcological services. We procured funding from government reproductive health and narcological services. We procured funding and opened a community center for women IDUs and in less than one year served over 300 women with harm reduction, housing, social, and legal services and referrals to medical treatment. We also went to local government and educated patrol officers on the value and importance of programs.

Next steps: In order to reduce the risk of infectious disease, it is essential that women IDUs be provided with better access to preventive and drug treatment services. Building on our previous research we are conducting a more
WEPE0898

Prioritising HIV prevention for young women and girls (YW&G): advocacy in action

J. Hopkins1, L. Collins2, R. Fransen-dos Santos3, K. Osborne4
1IPPF Kingdom, London, United Kingdom, 2UNFPA, New York, United States, 3International Civil Society Support, Amsterdam, Netherlands, 4Young Positives, Amsterdam, Netherlands

**Issues:** There are five key elements that influence HIV prevention, namely: legal provision; policy provision; availability of services; accessibility of services, and participation and rights. To understand why the prevention needs of YW&G are currently not being met, research is needed to better understand the challenges, opportunities and barriers faced by YW&G.

**Description:** Qualitative research was conducted in 25 countries to develop national ‘HIV prevention for girls and young women’ report cards. The information gathered through desk-based research, in-country focus group discussions with YW&G (including those living with HIV), and stakeholder interviews with UN agencies, service providers and government officials. The basis of information gathered, recommendations for action were made, and an implementation plan was developed at a Youth Symposium and a National Stakeholders’ meeting.

**Lessons learned:** The report cards have had the following policy and programmatic impacts:

1. Influencing government policy: In at least eight countries the report cards have been used as an advocacy tool to influence the government on HIV prevention for YW&G.
2. Strengthening HIV prevention programmes: In more than 10 countries HIV programming has been strengthened from the report card results and recommendations.
3. Building and supporting partnerships: The research and follow-up processes brought stakeholders together enabling them to develop a joint plan of action to put the recommendations into practice.
4. Increasing participation: Involving YW&G in the research and follow-up increased ownership and gave YW&G a chance to speak up about their HIV prevention experiences and needs.

**Next steps:** To meet the diverse and ever-changing HIV prevention needs of YW&G a broader, more participatory approach is required. YW&G need access to affordable, non-discriminatory services, and participation and rights. To understand why the prevention needs of YW&G are currently not being met, research is needed to better understand the challenges, opportunities and barriers faced by YW&G.

Presenting author email: jhopkins@ippf.org

WEPE0899

Empowering women to reduce marital rape as a human right violation

R. Gachiri

Health Rights Advocacy Forum (HERAF), a Member of Kenya AIDS NGOs Consortium (KANCO), Policy, Nairobi, Kenya

**Issues:** Marital rape is not recognized as a crime in the Kenyan constitution. This is just an indication that it is being disregarded by Kenyan authorities hence the need to empower our women in the communities and also advocate for the recognition of marital rape as sexual offence.

**Description:** An attempt to reduce the incidents, HERAF engaged community members in discussions during which the concept of marital rape in the community was discussed. It emerged from the forums that the rate of the incidence is on the increase and that there is high ignorance in the community since it is not recognized by the local laws.

**Lessons learned:** Recognizing marital rape as a criminal offence will reduce HIV infection among women. The incidences of marital rape are on the rise. This is to indicate that there is a relation between marital rape and high increase of HIV infections among women in Kenya. Empowered community leaders including women can play a role in reducing marital rape.

**Next steps:** Forums with policy makers should be conducted in order to advocate for the recognition of marital rape as a sexual offence. Continue empowering community leaders to enlighten the community about marital rape and its consequences.

Presenting author email: jhopkins@ippf.org

WEPE0900

Positive outcomes of gender-sensitive harm reduction programs in Ukraine: linking harm reduction, HIV services and reproductive and sexual health, and protecting the human rights of women who use drugs

R. Tolson, O. Ryuchkova

Open Society Institute, IHRD, New York, United States

**Issues:** Women account for 48% of all HIV cases in Ukraine. Women drug users are especially vulnerable to both sexual and injection-transmitted HIV infection, while most of the existing harm reduction programs were designed to serve male clients and do not account for the specific needs of women. Women’s access to medical services, including sexual and reproductive health care, PMTCT and substitution treatment (ST) during pregnancy, is often thwarted by discrimination in health care settings, while abuse from police and/or their partners further exacerbates the situation. To address these issues, gender-sensitive harm reduction programs were launched in 2008 in 5 Ukrainian cities, and in 2010 a qualitative assessment was conducted to evaluate their effectiveness.

**Description:** The assessment demonstrated that effective models were based on a multidisciplinary approach involving mobile HIV and STI testing and counselling, assistance in restoration of documents, referrals to social services and trusted medical care providers, parenting classes and child care. Legal aid to address police and/or domestic violence and child custody threats was crucial in addressing structural obstacles keeping clients from seeking help, while linking sexual and reproductive health care, HIV/AIDS services, drug treatment and harm reduction, with a special focus on access of pregnant women to ST, improved reproductive health outcomes.

**Lessons learned:** The programs’ targeted interventions have increased women drug users’ access to services and medical treatment, including reproductive and sexual health, timely enrolment to PMTCT treatment during pregnancy, helped to preserve families and avoid wrongful conviction, and in many cases have decreased levels of discriminatory behaviour from medical providers and law enforcement officials in Ukraine.

**Next steps:** Similar assessments of the impact of gender sensitive harm reduction programs in Russia and Georgia will be conducted, and possibilities for adopting these models more broadly throughout the region will be explored.

Presenting author email: btolson@rosr-n.org

WEPE0901

Reducing women’s and girls’ vulnerability to HIV/AIDS: building a multi-sectoral response to gender-based violence in Zomba, Malawi

C. Devine1, E. Ratsama1, M. Dodgi2, C. Mesikan3, C. Kamowa1, N. Chibondo4, P. Rasepaku5

1Signitas International, Toronto, Canada, 2Dignitas International, Zomba, Malawi, 3Women in Law in Southern Africa Research and Education Trust (Malawi), Blantyre, Malawi, 4Chief Magistrate, Blantyre, Malawi, 5Victim Support Unit, Zomba Police, Zomba, Malawi, 6Reproductive Health Unit, Ministry of Health, Lilongwe, Malawi

**Issues:** Women and girls are disproportionately affected by HIV/AIDS and gender-based Violence (GBV). GBV survivors require integrated, quality services, and services, men and boys must to be involved, and at the governmental level work is required to ensure there is a supportive legal and policy framework where the rights of YW&G are upheld.

**Description:** Recognizing marital rape as a criminal offence will reduce HIV infection among women. The incidences of marital rape are on the rise. This is to indicate that there is a relation between marital rape and high increase of HIV infections among women in Kenya. Empowered community leaders including women can play a role in reducing marital rape.

**Next steps:** To meet the diverse and ever-changing HIV prevention needs of YW&G a broader, more participatory approach is required. YW&G need access to affordable, non-discriminatory services, and participation and rights. To understand why the prevention needs of YW&G are currently not being met, research is needed to better understand the challenges, opportunities and barriers faced by YW&G.

Presenting author email: devine@esu.ca
WEPE0902
The intersections of HIV and violence: what works and the unfinished agenda

J. Gay, K. Hardee, M. Croce-Gallic
Open Society Institute, Takoma Park, United States, Population Action International, Washington, United States, Open Society Institute, Consultant, NY, United States

Issues: Violence, in addition to being a human rights violation, has been shown to be a risk factor for acquiring HIV. Children who are abused are more at risk as adults of acquiring HIV. In many countries, there are few services for women who are subjected to violence.

Description: Peer-reviewed literature from 2001 through 2009 with nearly 2,000 articles, compiled in What Works: Evidence for HIV/AIDS Interventions for Women and Girls, produced by ODI and PASI, found evidence that community-based participatory learning approaches involving men and women can create a gender-equitable relationships, and reduce the risk of acquiring HIV. Comprehensive counseling and post-exposure prophylaxis for survivors can reduce the risk of acquiring HIV. Microfinance programs have been shown to reduce the risk of violence. However, interventions are needed to decrease the acceptance of sexual violence and coercive sex. In a number of countries, there is no recourse for women who are victims of rape. Interventions are needed with men to reduce the likelihood of violence and rape.

Lessons learned: While a number of countries have instituted policies, protocols and services for post-exposure prophylaxis, so that girls and women who are raped do not stigmatize if their rapist is HIV-positive, much more work is needed to prevent violence in the first place.

Next steps: This evidence regarding violence and HIV, among other issues, will be widely disseminated to countries programs (including governments and civil society) and donor organizations. A web-based version will facilitate accessing the evidence in advocating for and designing programs on violence and HIV. Countries should address the needs of women who suffer from violence, including exit strategies. UNFEM is launching a website in March 2010 with model policies, protocols and how to guidance: www.endvaw.org

Presenting author email: jill@aol.com

WEPE0903
The implications of state sexual violence on negative reproductive health outcomes in post-conflict Liberian women

A. Arawa, Y. Nightingale, J. Garloa, L. Eaton, L. Beletsky
Yale School of Public Health, Center for Interdisciplinary Research on AIDS, New Haven, United States

Background: State sexual violence (SSV) is violence involving the sexual dehumanization of the body on behalf of government officials. Although there is a link between violence and negative reproductive health outcomes, little is known about the relationship between SSV and reproductive health. To better understand the relationship, we examined SSV and women’s sexual and reproductive health in post-conflict Liberian women.

Methods: This study is based on data from the 2007 Liberia Demographic and Health Survey and included (N=3,182) women between the ages of 15-49 and covered the entire country. The survey included modules on reproductive health and violence. Additionally, blood samples were taken for HIV testing. State sexual violence was defined as women reporting soldier or police sexual violence apart from sexual assault. The comparison group was women who did not report forced sex from a police or soldier.

Results: Reporting SSV were more likely to be unmarried and reside in Northern Liberia. Additionally, they were more likely to report sexually transmitted infection symptoms (OR=3.10, CI95%=1.60-6.2, p<0.001), transactional sex (OR=8.94, CI95%=3.30-24.27, p<0.002), and two or more sexual partners (OR=3.57, CI95%=1.5-8.50, p=0.004) in the last 12 months compared to those who were not victims. These women were also more likely to report a miscarriage (OR=2.20, CI95%=1.09-4.45, p=0.03). Although not statistically significant, the odds of HIV-infection were 4 times higher among women who experienced SSV. Despite their increased health risks, no significant relationship was observed between women reporting SSV and recent health care utilization.

Conclusions: In post-conflict Liberia, the range of sexual and reproductive health outcomes in women who were victims of SSV highlights potential challenges in developing appropriate health care services. Study findings will be discussed in the context of the challenges Liberia is currently facing in developing health care services and addressing human rights issues.

Presenting author email: vienna.nightingale@yale.edu

WEPE0904
Law, policy and human rights: specific issues and populations

K. Endalt
Lawyer’s Collective HIV/AIDS Unit, Legal, Shirpur, India

Issues: The domestic violence law in India is proving to be an effective tool to secure the rights of women living with and affected by HIV.

Description: Prior to the implementation of the Protection of Women with Domestic Violence Act, 2005 (PWDVA) in India, women subjected to domestic violence found it difficult to effectively seek and obtain legal redressal for their injuries. The implementation of PWDVA has improved the rights of women living with or affected by HIV.

Lessons learned: PWDVA is a secular law applicable to persons of all religions. Through PWDVA, the judiciary has also been able to secure favourable residence and maintenance orders for Muslim women, including a Muslim widow. This would have been otherwise difficult under the Muslim law applicable to them.

Next steps: The judiciary has to be sensitised to complete the proceedings within the time prescribed by the PWDVA and also pass ex parte interim orders. Alternatively, the PWDVA should be amended to mandate speedy disposals of cases.

Presenting author email: kunal.endalt@lawyerscollective.org

WEPE0905
Gender-based violence, women’s rights, and HIV control legislation: lessons from Uganda

K.T. Seeling,* D. Bangberg,1,2,4 Center for Gender and Refugee Studies, University of California - Hastings College of the Law, San Francisco, United States, 1Massachusetts General Hospital, Center for Global Health, Cambridge, United States, 2Ragon and GBV Institute of Massachusetts General Hospital, Massachusetts Institute of Technology and Harvard University, Cambridge, United States, 3Harvard Medical School, Cambridge, United States

Issues: Gender-based violence (GBV) increases women’s risk of HIV infection. Conversely, disclosed HIV+ status can itself leave women vulnerable to domestic violence and HIV-related stigma.

Description: We performed a comprehensive analysis of the HIV control bill pending in the Ugandan Parliament and recent legislation relating to the protection of women from GBV. We also explored Uganda’s non-statutory sources of women’s rights. In August 2008 and August 2009, we interviewed major stakeholders in Kampala (lawyers, activists from women’s rights and HIV+ communities) regarding possible impact of proposed GBV control initiatives upon women whose basic rights to bodily integrity and property were not secured.

Lessons learned: GBV in Uganda includes rape, beatings, psychological harm, and property-grabbing by in-laws. Uganda’s Parliament passed the Domestic Violence Act in November, 2009 and introduced the Marriage and Divorce Bill a month later. These measures criminalize GBV and make it easier for women to leave abusive relationships. They incidentally serve HIV prevention goals by protecting women from infection caused by intimate partner violence. However, the HIV and AIDS Prevention and Control Bill presents a paradox of protection. Advocates fear its mandatory testing, disclosure, and criminalization provisions will a.) discourage women from accessing health services, and b.) render women who disclose their HIV+ status vulnerable to GBV, marginalization, and threats of prosecution. Lack of gender-equitable property and inheritance legislation increases the vulnerability of HIV+ women, particularly widows.

Next steps: HIV control laws privileging deference of transmission without regard to protection of HIV+ individuals may have negative human rights implications, particularly for women. Microfinance programs have shown to be a risk factor for acquiring HIV. Children who are sexually abused while a number of countries have instituted policies, protocols and services for post-exposure prophylaxis, so that girls and women who are raped do not stigmatize if their rapist is HIV-positive, much more work is needed to prevent violence in the first place.

Presenting author email: kts@law.nyu.edu

WEPE0906
Malawi Red Cross: preventing and responding to gender based violence (GBV)

G. Mwinangwa
Malawi Red Cross Society, HIV & AIDS, Lilongwe, Malawi

Issue: Efforts to reduce stigma, discrimination and gender-related violence have been at the core of the Malawi Red Cross Society’s (MRCS) HIV and AIDS programme since its launch in 2006. To meet these objectives, the MRCS has worked to shift the responsibility for handling GBV cases away from traditional mediators to newly established victim support units, as well as addressing cultural practices that can prevent women from reporting violence.

Description: The MRCS aims to contribute to a reduction in HIV infection rates by reducing incidents of GBV in communities where it is active. Important strategies deployed to achieve this aim include:

• The integration of GBV interventions into all programmes
• Specific interventions that target girls in schools
• Working to empower young men as ‘agents of change’. This intervention promotes the adoption of safer sexual practices by young men which in turn improves the sexual and reproductive health of both young men and young women.
• The establishment of community victim support units in collaboration with the Ministry of Gender, Child and Community services, UNICEF the Malawi Police and the judiciary.
• The launch of a ‘Kicking out GBV through Sports’ campaign

Lessons learned:
• Partnerships: No single agency can fully address GBV. Agencies must be prepared to work with others and engage key social institutions.
• Men and boys, as well as cultural and traditional leaders, must be engaged as partners of change.
• The popularity of sports can be used to spread anti-GBV messages and better engage and mobilize communities.
WEPE0907
Domestic violence among uniformed services in India: implications for HIV response

Wi. Singh
Maitri, Delhi, India

Background: This Project aims at studying the various forms of domestic violence, in the lives of uniformed personnels’ wives and their vulnerability to acquiring STIs & HIV infections. To explore the patriarchal norms among Army personnel that accelerates domestic violence. To know the level of inequality in men and women control over various resources by target population.

Method: Data was collected from “200 army wives”. Wife of the uniformed service member based on a structured questionnaire.

Findings: 13% of the respondents got married before the age of 15-17. Respondents were inquired about their willingness to study higher and whether they have been prevented from getting higher education. 33% respondents reported that they wanted to study further, whereas nearly 43% said that they did not want to study further. From among those who answered the question, maximum (34%) reported that the resources were controlled by the mother in law. 28% of the respondents said that the families and the resources were controlled by their husbands. Close to 6% said the resources were controlled by the husband’s younger brother. A little over 4% of the respondents reported that in their families, their father-in-law controlled the resources.

Conclusion: Some of the women are suffering violence but they do not have the courage and social support to retaliate or complain. In most families, the resources and the lives of the women are controlled either by their husbands or in-laws.

Presenting author email: winnie.singh@maitri.org.in

WEPE0908
“We have rights to live with dignity” - role of secondary stakeholders and community based organizations in addressing violence against women in sex work

C.S. Gowda1, P. Pushalatha1
1Swasti, Bangalore, India, 2Swathi Mahila Sangha, Bangalore, India

Issues: Women in sex work (WSW) experience high level of violence from secondary stakeholders and community based organizations in addressing violence against women in sex work and has compromised her ability to protect from HIV infection. On any given day more than 2 cases of violence is reported & over 3042 cases since four years. The perpetuators are Police, followed by Partners of sex workers and fellow sex workers, besides others. Incidents of rape, group sex, sex without condoms and forced anal sex have telling tale on HIV prevention and affect women's self esteem.

Description: The Community Crisis Response Team (CCRT) with support from lawyers and other human rights activists started the crisis response system. This system has 24/7 helpline totally managed by sex workers. On an average they receive 10-15 calls per day. They also have meetings among the workers in brothel for providing support to each other.

Lessons learned: We have found that women have started speaking up for themselves and are taking control of their lives. They are managing their resources and doing away with the traditional roles assigned to them.

Steps: Scale-up this model in rest of Karnataka and India.

Presenting author email: shokhar@swasti.org

WEPE0909
Prevention of HIV through preventing adolescent girls from sex business

J. Saha Piwoo, A.Y. Choudhury, E. Haque
PACT Bangladesh, Dhaka, Bangladesh

Issues: Adolescent sex workers (SWs) have high demand to clients but condom use rate among them is very low. PACT Bangladesh prevents trafficked adolescent girls from entering into sex business and give special efforts to promote condom use among adolescent SWs.

Description: Most countries do not recognize prostitution. Women engaged in sex business are deprived of enjoying basic human and social rights. For example, in Bangladesh, HIV/AIDS policies, 2003, is implementing a program in Daulatdia brothel having around 2500 SWs of which 25% are adolescent girls. Because of the lack of value, many of these girls are trafficked in sex business in the brothel. The clients usually do not use condom with them for getting more pleasure. The adolescents are unaware about risk of unsafe sex. Trafficking is prevented by several interventions namely, forming local rescue committee, establishing information and counseling center in the brothel, rendering legal support to victims and holding dialogues with notary public magistrate to prevent false affidavit for sex business. During the project period around 500 trafficked minor girls were rescued and reintegrated with their families. Those adolescents who are already in sex business are given special care for safe sex. The Self Help Group is actively involved in such efforts.

Lessons learned: A large constituency is created in favor of preventing minor girls from sex business and thus they are protected from HIV infection.

Next steps: A norm would be established at the Daulatdia brothel so that no under aged girls get involved in sex business. For those already in sex business, efforts for condom use will be strengthened. Continuation and expansion of such efforts in other brothels are highly recommended to prevent HIV infection in Bangladesh.

Presenting author email: joyeeta@pwoom@yahoo.com

WEPE0910
Wards of the state: law, policy and young sex workers’ special vulnerabilities to HIV/AIDS

B. Conner
Global Network of Sex Work Projects, Edinburgh, United Kingdom

Issues: Young people of all ages have seen increased attention in HIV/AIDS discussions, yet there exists little to no policy guidance on providing rights-based universal access to HIV prevention, care, treatment and support for young people in the sex industry. Current policies around the forced ‘rehabilitation,’ incarceration and mandatory reporting of young people in this industry only compound the special vulnerabilities of young women and men, including transgender persons, to HIV/AIDS, exploitation and violence.

Description: This presentation provides findings and recommendations from a recent Global Network of Sex Work Projects (NSWP) service review of generational and country-level policies and practices relevant to young sex workers. The goal is to highlight case-specific conflicts in service provision for policy makers and service providers.

Lessons learned: NSWP’s findings point to an urgent need to expand the application of a human rights perspective to key populations in the HIV/AIDS epidemic. In particular, to those that may be hidden, at-risk and underserved. Results indicate the extension of services must consider young people’s special status under the law as subjects of parental or state custody and vulnerable to criminalization and violence. The review suggests likely outcomes of poorly tailored interventions include: greater incorporation through mandatory state custody of minors, including children of adult sex workers, increased violence perpetrated by uniformed services, the aggressive prosecution of adult sex workers as alleged procurers of young people, increased marginalization as a result of stigma and an inability to safely access HIV prevention commodities and services.

Next steps: Recommendations include: the need to channel HIV/AIDS funders toward efforts to repeal punitive laws around youth sex work; increase young sex workers’ access to HIV/AIDS health services free from the threat of arrest; and fund international, regional and country-level youth workers and programs at existing sex worker organizations.

WEPE0911
Sexual and reproductive health rights of adolescents living with HIV: a review of the evidence on gaps in HIV services in low-income settings

L.F. Ross1, F. Cataldo1, A. Fakoya1, G. Gordon1
1International HIV/AIDS Alliance, Evidence for Action Research Consortium, Brighton, United Kingdom, 2International HIV/AIDS Alliance, Best Practice Unit, Brighton, United Kingdom

Issues: In low-income settings, services for adolescents living with HIV are underdeveloped, as paediatric and adult HIV services remain ill-equipped to deal with the complex needs of this group. Through being denied appropriate services, the growing population of adolescents living with HIV is effectively deprived the right to access comprehensive HIV interventions, information, care and support.

Description: We reviewed the existing evidence around adolescents living with HIV and the rights of adolescents

WEPE0909-WEPE0911

HIV and the rights of adolescents

WEPE0909
Prevention of HIV through preventing adolescent girls from sex business

WEPE0910
Wards of the state: law, policy and young sex workers’ special vulnerabilities to HIV/AIDS

WEPE0911
Sexual and reproductive health rights of adolescents living with HIV: a review of the evidence on gaps in HIV services in low-income settings

WEPE0907
Domestic violence among uniformed services in India: implications for HIV response

WEPE0908
“We have rights to live with dignity” - role of secondary stakeholders and community based organizations in addressing violence against women in sex work

Author Index

Author

Papers

Wednesday 21 July
Poster Exhibition

Thursday 22 July
Late Breaker Posters

Index

Exhibition

Poster

Abstract Book Volume 2 | www.aids2010.org
Policies of sexual regulation
WEPE0912

WEPE0912.1 Dynamic prevention programs in gay bathhouse more likely under non-regulatory policies
W.J. Woods, D. Binson, L.M. Pollack, N. Sheon
University of California San Francisco, Medicine, San Francisco, United States

Background: HIV prevention policies for gay bathhouses vary widely across the United States. To evaluate these policies, we studied bathhouse prevention policy and programs in nine U.S. cities.

Methods: Data from twelve health jurisdictions in these nine cities included observations at 25 bathhouses; in-depth interviews with 22 bathhouse managers, 18 health officials, 27 HIV prevention service providers, 17 community activists; and 20 bathhouse patron focus groups.

Results: Analysis revealed three regulatory policy approaches: (1) disregard bathhouses and non-clinic based services, and establishing partnerships and referral networks; (2) regulate bathhouse managers' responsibilities and patrons' behavior, and (3) regulate both managers' responsibilities and patrons' behavior, and no non-regulatory policy approaches, (1) disregard bathhouses and (2) cultivate stakeholder cooperation to develop prevention.

None of the five policy approaches appear to be evidence-based. The three regulatory policies narrowed interactions between health officials and managers to policy defined roles of "regulator" and "regulated." Discussion among regulatory policies narrowed interactions between health officials and managers, 18 health officials, 27 HIV prevention service providers, 17 community activists; and 20 bathhouse patron focus groups.

Conclusions: Evidence-based policies require that prevention programs, health jurisdictions should implement non-regulatory policies that cultivate stakeholder cooperation.

Presenting author email: william.woods@ucsf.edu

WEPE0914 Transformation of a Serbian PLHIV movement - from a frighten individuals to a Serbian PLHIV Union
M. Janjic
South of JAZAS, The Global Fund Round 8 Project Implementation Team, Belgrade, Serbia

Issues: By 2007, Serbia was the only country in Europe without PLHIV self-help group. Having over 20,000 HIV cases (2000 registered), HIV/AIDS posed tremendous risks to vulnerable communities. PLHIV, MSM, CSW, DVA and Roma were objects of discrimination, victims of physical and verbal violence. In 2008 project "Acceptance and Participation of PLHIV in Serbian Society" was initiated in order to strengthen the capacities of PLHIV, co-ordinate joint activities and support establishment of Serbian PLHIV Union.

Description: Achieved:
- Identification of 10 regional centres for mobilizing PLHIV into local self-help groups
- Forming self-help groups of PLHIV in 10 Serbian provinces
- Training of PLHIV in organizational management and project development, providing AIDS education and related services
- Establishing provisional National PLHIV self-support groups

Lessons learned: By end of 2008 10 regional centres were identified. Throughout outreach work individuals from formal groups were contacted and involved in project activities. By July 2009, 9 self-help groups of PLHIV were functional. They formed provisional PLHIV Network. PLHIV delegations visited similar initiatives in Romania and the Netherlands. National AIDS Expert group was formed and functional. During preparations for Founding Assembly of Serbian PLHIV Union, the Speaker of the National Assembly of the Republic of Serbia officially hosted Serbian PLHIV Union Delegation, thus giving an immense impact on changing environment with regards to the PLHIV issues.

On December 11, 2009 Union of Serbian PLHIV organisations - USDP has been formally established.

Next steps:
- Further development of Serbian PLHIV Union and its recognition in Serbia, SEE and WorldWide.
- Effective cooperation between target communities, civil society, policy makers to promote improved attitudes, suitable environment and equitable access to prevention and treatment.
- Effective government policy and/or public health legislation adopted, financed by the national government to facilitate equitable access to prevention and treatment.

Presenting author email: momcito.janjic@globalfund.rs

WEPE0915 Collaborations between PLHIV organisations are an effective method of increasing the capacity of positive networks in the Asia Pacific Region
R. Baldwin1, B. Sittihinphone2, L. Rock1
1Asia Pacific Network of People Living with HIV (APNH+), Bangkok, Thailand
2Lao Network of PLHIV (LNP+), Vientiane, Lao People’s Democratic Republic

Issues: Strong national networks of PLHIV are vital to the meaningful involvement of positive people in an effective HIV response; yet often these networks lack capacity, skills and resources.

Description: The Asia Pacific Network of PLHIV (APNH+) has strategic objectives that include strengthening and growing national networks of positive people. One method we are using to achieve these objectives is to actively support ‘south-to-south’ collaborations, and our latest example of these efforts is showing success with a working relationship now established between the neighbouring countries of Thailand (TNP+) and Laos (LP+) of national PLHIV Networks.

Lessons learned: APNH+ has played an important role as a catalyst and negotiator to bring together key people from TNPH+ and LNP+ to identify areas of need and potential collaborations. TNPH+, which is a well-established PLHIV network, has now been assisting with the leadership development of LNP+, a relatively nascent PLHIV network. APNH+ also has helped to ease the burden of leaders by building on existing networks and securing funding to enable this work to proceed. The long-term commitment by APNH+ to encouraging and supporting...
WEPE0916

A grassroots’ response to the HIV/AIDS epidemic in Mountain Cunene, China: social action theory to create the integration of prevention and care

H. Li, G. Sheng, H. Yi
1The Chinese University of Hong Kong, School of Public Health and Primary Care, Hong Kong, China; 2Shenzhen 258 Rainbow Workgroup, Shenzhen, China; 3Columbia University and New York State Psych. Institute, New York, United States

Issues: Despite the global call for the integration of HIV prevention and treatment/care in resource-limited settings, there is a wide discrepancy in health services systems and community infrastructures between prevention and care in China. Such a dynamic creates a critical barrier for the development of an effective and sustainable community intervention for MSM.

Description: The goal of this ongoing project is to reduce the division between HIV-positive and negative MSM community-based organizations (CBOs) in Shenzhen, China. We employed Social Action Theory to enhance the ability to identify and solve the problems and ultimately strengthen community empowerment for the MSM positive-negative community as a whole. The effect is to provide opportunities for the volunteers from the sides of CBOs to work together and share knowledge, opinions, and feelings to increase the awareness of human rights for HIV-positive people.

Lessons learned: The evolving HIV-negative-positive community building allowed us to effectively address health problems and achieve concrete promising results. HIV-negative volunteers, with more understanding knowledge and skills of how to work with HIV-positive MSM. HIV-positive volunteers, with growing confidence and self-esteem, obtained chances to engage in social activities with HIV-negative peers; HIV-positive men better cope with self-stigma, isolation and self-identification. Our project also encouraged HIV-positive MSM to be peer educators as well as to disclose their seropositive status to partners and friends. Through these activities, both are empowered and returned to their own MSM communities as responsible members fighting against HIV/AIDS.

Next steps: We will conduct life-history interviews with HIV-positive MSM about their stories of coping with the illness to develop educational materials for primary and secondary prevention interventions. This will also raise the critical consciousness facilitating our community mobilization for human rights in health equality and equity in the epidemic of China.

Presenting author email: johneck@optusnet.com.au

WEPE0917

The arts and communities HIV, harm reduction and human rights expertise, can enable social and policy change. Collaborative community art is a dynamic narrative and counterproductive responses, opening dialogue and forming dynamic networks that advocate for responsive policy shifts to meet their changing needs. The process is as important as the outcome.

K. Davis
GloballyAwareArt Advocates AIDS Awareness, Bali, Indonesia

Issues: Community art processes are a proven catalyst, for direct and unmediated insights into the unique knowledge of HIV/AIDS communities by represent themselves. Through utilising their authentic expertise in HIV, Harm Reduction and Human Rights issues, we can enable responsive social and policy change.

Description: GloballyAwareArt enables this change. Using collaborative arts process, HIV affected community tell their stories as individuals, family members and health service providers/users. Optimum outcomes require the arts practitioner to be immersed in the community, work cross-culturally and ensure a safe environment for participants to commit fully. Since 2006, over 1500 HIV affected people have created truly amazing art-work in jungles, temples, conferences, studios and villages in 30 countries worldwide. AIDS08Mexico, GloballyAwareArt exhibition was viewed by 25,000 delegates, 110 countries. In July 2008, it was launched on the back door of AIDS2008 closing ceremony. At ICAAP09Balit “Cremation of Discrimination” was installed. Aman +. His services have benefitted from more than 2000 people. The organization was founded on the initiative of the IDU community, allowing the greater involvement and empowerment of people living with HIV & AIDS.

Next steps: We have prepared an agreement to provide free services to other medical institutions in Bishkek, which allows customers to have a permanent unobstructed access to health services.

Presenting author email: k.davis@yahoocom

WEPE0918

Empowerment and leadership building of PLWAs through networking: the case of Sudanese Network of associations of people living with HIV/AIDS

E. Farg, R. Osio
Sudanese Network of Associations of People Living with HIV/AIDS, Khartoum, Sudan

Issues: Sudan has the highest HIV prevalence rate in Arab States Region with 350.000-600.000 PLWAs ( WHO / UNAIDS 2008 Report). The major determinants of the epidemic are: increased unprotected sexual activity among Youth; multiple sexual partners; denial of the existence of the disease; stigma and discrimination. The continual increase in the number of PLWAs and the morbidity and mortality linked to opportunistic infections shows that prevention alone is not enough to effectively combat HIV/AIDS in Sudan. Based on that, the beginning of the HIV/AIDS response in Sudan was characterized by the creation of several associations of PLWAs and the care of these PLWAs. A survey on the needs of Sudanese associations and NGOs engaged in combating HIV/AIDS brought the following results: Existence of several PLWA associations; Absence of productive coordination, high Stigmatization and discrimination against PLHA, Following a networking workshop held in Khartoum in May 2008 Sudanese Network of PLWA was established.

Description: As an outcomes of the establishment of Sudanese Network of PLWA mange to: Involve the PLHAs in national, regional and international decision-making bodies; Construct a pressure group to advocate and to defend the rights of PLHA; Build the capacity for associations of PLWAs and those of care and support;

Lessons learned:
- The competent acquired through networking training benefited members
- The traditional solidarity enjoyed by PLHA within the member associations is an opportunity for long-term and viable projects.
- The active role played by the female members of the Sudanese Network of PLWA executive board is an inspiration for other women to participate and benefit from Network activities.

Next steps: Enhanced coordination and effective implementation will facilitate the greater involvement and empowerment of people living with HIV & AIDS in Sudan.

Presenting author email: mohamab18@hotmail.com

WEPE0919

Ensuring access for IDUs to basic health services

V. Taraniuk
1R. Berg
R. Berg
NGO Aman+, Bishkek, Kyrgyzstan

Issues: In Kyrgyzstan, more than 2000 HIV, 74% of them are IDUs. First Drop-in center for IDUs in Kyrgyzstan was opened in 2006, based on the Aman +. His services have benefitted from more than 3000 people. The organization was founded on the initiative of community IDUs in Bishkek, their ensuring maximum access to the private representatives of vulnerable groups. Drop-in Center providing an intensive package of harm reduction services 24 hours a day. Cooperates effectively with medical institutions. Customers rent free tests, receiving TB treatment in the regional center of TB and free treatment for HIV, STD, syphilis, hepatitis C integrated services, working effectively to change the risky behavior of clients, to improve health. Self-help groups, the work of psychologist, access to health services, social support, creates favorable conditions for the implementation of harm reduction. We signed the contract to provide free services to other medical institutions in Bishkek, which allows customers to have a permanent unobstructed access to health services.

Next steps: We have prepared an agreement to provide free services to other medical institutions for the next year, which will provide a guaranteed basic public health services.

Presenting author email: v_taraniyk@mail.ru

WEPE0920

Cooperation with the police, to create a conducive environment for harm reduction services

R. Berg
1R. Berg
R. Berg
NGO Aman+, Bishkek, Kyrgyzstan

Issues: At present in Kyrgyzstan more than 2000 HIV-positive people, 74% of them are IDUs. First Drop-in center for IDUs in Kyrgyzstan was opened in 2006. In Bishkek on the basis of Aman +. To date, his services were used by over 2000 people. The organization was founded on the initiative of the IDU community, allow-
WEPE0921
Does civil society have a meaningful voice in CCMs? Findings from a qualitative study conducted by the Civil Society Action Team (CSAT) measuring the civil society participation in Country Coordinating Mechanisms (CCM)

M.A. Torres 1, H. Boda1 1ICASO, Toronto, Canada, 2German BACK UP Initiative, Eschborn, Germany

Background: From its inception, the Global Fund (GF) has been a model of public/private partnership, facilitating cross-sectoral collaboration, introducing key principles to ensure the transparency and inclusivity of CCMs. These include requirements for a minimum of 40% representation of civil society (CS), specifying that including groups of people living with and affected by HIV, TB and malaria. Despite the immense opportunity presented, the reality of CCM function remains challenging and complex.

Results: • CS representatives often lack the capacity and expertise to engage in CCM processes and accountable represent their constituents. • Representatives of PLHIV are present in CCMs, but lack genuine access to decision-making. Meanwhile, KAP are still absent. • CS representatives are selected through inconsistent procedures. • Communication (from CCMs to members and from CS representatives to constituents) is limited and unsystematic. This affects CS understanding and engagement in CCM processes. • Grant oversight and transparency of proposal development vary significantly, being often very limited. • GF mechanisms (including M&E) should focus far more on CCM reform to improve oversight, CS representation and transparent decision making at national level. • Involvement of CS in CCMs is often hampered by multiple internal departmental check boxes and limited willingness to have rotation principles for CS representation, etc.

Conclusions: Findings identified key directions for policy-makers in enhancing involvement of CS in CCMs and will be used to develop evidence-based advocacy strategies to support a more meaningful involvement of civil society, particularly PLHIV and KAP, in CCMs.

Presenting author email: maryanit@icaso.org

WEPE0923
Private sector in Argentina engaged in prevention of HIV/AIDS and the rights of people living with HIV

A. Mercado Gurral1, A. Dorigo1, M.C. Trejo1, K. Frieder1, P. Cahn2 1Fundación Huesped, Secretaría de la Comunidad, CABA, Argentina, 2Fundación Huesped, Dirección Ejecutiva, Capital Federal, Argentina, 3Fundación Huesped, Presidencia, Capital Federal, Argentina

Issues: Increased involvement on the part of the private sector in Argentina in respecting the human rights of employees living with HIV and in HIV prevention.

Description: Between 2007 and 2009, Fundación Huesped’s Department for the Promotion of Rights received a total of 1,100 people living with HIV. 38% of the queries concerned discrimination in the workplace. The workplace can play an important role by providing a space for the dissemination of HIV-related information and the organisation of HIV training activities. The private sector is key in the HIV/AIDS response. This includes their participation in CCMs, and their involvement in the implementation of relevant case for studying multi-level governance and the politics of scale for regions. The study targeted a range of CS stakeholders and 24-hour community-based organizations working across the country.

Next steps: Encourage further HIV prevention efforts and the promotion of human rights in member companies in 2010. Work with employees and their families. The spearheading group will be working together with human resource managers and encourage them to join this initiative and hold awareness-raising meetings. Document good practice in HIV programming with the private sector. Reward those most committed on the 1st of December 2010.

Presenting author email: kurt.frieder@huesped.org.ar

WEPE0924
Politics of scale in Russian HIV/AIDS prevention: a case study of five municipalities in Northwest Russia

A. Aasland1, P.S. Jones1, A. Granningsaeter1, P. Meykhs1 1Norwegian Institute for Urban and Regional Research (NIBR), Oslo, Norway, 2Fako Institute of Labour and Social Research, Oslo, Norway, 3Centre for Independent Social Research, St. Petersburg, Russian Federation

Background: In responding to the HIV/AIDS epidemic Russia faces tremendous governance challenges as a federal state with a vast territory, great territorial variations in bureaucratic capacity, socio-economic and cultural conditions, as well as in HIV prevalence rates. The complex federal structure, the vertical and decentralised health-care system with weak tradtional cross-sectoral collaboration, increased participation of non-state actors, and involvement of international actors in prevention, means it is a particularly relevant case for studying multi-level governance and the politics of scale for the response to the epidemic.

Methods: 35 semistructured interviews with policy-makers at federal, regional (Leningrad and Arkhangelsk oblasts, city of St. Petersburg) and municipal levels. 8 focus group interviews with medical workers (AIDS experts and non-experts) and NGO representatives. 23 in-depth interviews with HIV-positive and vulnerable groups (IDUs, MSM, CSW). Field work conducted in 2008-9.

Results: Recent scholarly literature on Russian policy formation tends to view it as controlled by the centre, characterised by weak civil society and grass-roots participation, and lacking intersectoral cooperation. This study present evidence that in the case of Russian HIV/AIDS prevention all these

Roles and responsibilities of state, civil society and the private sector WEPE0922-WEPE0938
WEPE0925

Network of AIDS service organizations (UNASO) civil society contribution to the HIV/AIDS response in Uganda 2008

Uganda Network of AIDS Service Organisations (UNASO), Networking and Partnership, Kampala, Uganda, Uganda Network of AIDS Service Organisations, Kampala, Uganda, 3Independent Consultant, Kampala, Uganda, 4GTZ, BACKUP Initiative, Eschborn, Germany

Issues: Despite unprecedented HIV/AIDS funding the HIV/AIDS incidence rate has continued to increase against a multitude of unprecedented number of CSOs engaged in the HIV/AIDS response. This state of affairs is partly due to the lack of proper coordination and inequity of AIDS services at grass roots level. The response is characterised by competition for resources and service delivery at the district level. This entailed clustering all CSOs engaged in the HIV/AIDS response in their respective districts.

Description: After fourteen years of attempted coordination of HIV/AIDS CSOs, Uganda Network of AIDS Service Organisations (UNASO) decided to focus on coordination of the response at district level. This entailed clustering all CSOs engaged in the district response in 46 districts into local networks. The networks focus on regular sharing of contemporary HIV/AIDS information, joint planning and reporting and mapping of who is doing what, where and how. This is achieved through holding regular meetings, sharing of plans and reports.

Lessons learned: Joint planning and reporting among the CSOs goes along way in harmonising the grassroots response through minimising wasteful duplication. A coordinated CSO district response can be a major step in nurturing and strengthening the public private partnership. The current available HIV/AIDS resources can be used to scale up the local response even further.

Next steps: Form regional networks so as to develop broader agendas particularly for advocacy purposes with the proposed soon to be established regional federal governments. Development of a one broad CSO integrated HIV/AIDS plan so as to improve harmonised funding based on the jointly identified district priorities.

Presenting author email: bharam_namany@yahoo.com

WEPE0926

Social mobilization for the reduction of HIV employment-related discrimination in Burkina Faso
P. Del Pueblo de Peru, Lima, Peru, 3UNAIDS, Geneva, Switzerland, 4OHCHR, Geneva, Switzerland, 5UN Development Programme, Dakar, Senegal


Each workplace partnering with the project has established a joint labor and management HIV committee. A total of 14 workplaces have already adopted an HIV policy which includes a clause on non-discrimination and 13 are in the process of drafting one. A follow up survey will be conducted in April 2009 to assess the impact of the workplace interventions on workers.

The ILO project facilitated the creation of a National Coalition and ensured the participation of trade unions and PLHIV, who provide particular insights on the political side-effects of over individualized etiologies that disfavour structural change.

Presenting author email: mbam@humanrights.dk

WEPE0927

Disease framing and the political domestication of HIV/AIDS: individualistic etiologies and the minimization of the role and responsibility of the State in Tanzania
M. Hunsmann

École des Hautes Études en Sciences Sociales (EHESS), Paris, France

Background: HIV/AIDS is considered as surprisingly uncontroversial in much of Africa. In their explanations of this apolitical conception of disease, policy scholars have overlooked a decisive point: the telling of causal stories. In line with today's dominant etiologic framing of HIV/AIDS, Tanzanian authorities incessantly underline the role of individual behaviour, identifying it as the main explanatory variable. While acknowledging the importance of behaviour change, recent bio-medical and epidemiological studies emphasize the impact of non-behavioural variables such as parasitic infections, malnutrition and inadequate health care on populations' vulnerability to HIV.

Methods: This contribution examines the prevailing causal stories of HIV/AIDS in Tanzania. It is based on a systematic analysis of 80 interviews conducted with national and international policymakers between 2007 and 2009 and of the country's prevention slogans.

Results: The official etiology of HIV in Tanzania is fundamentally individualistic: the framing of HIV/AIDS as being principally a problem of behaviour and not of denied access rights suffers from a double reductionism. It concentrates quasi-exclusively on sexual transmission and, within sexual transmission, it focuses primarily on the immediate cause of HIV infection (unprotected sex), omitting biological determinants of transmission probability.

Conclusions: While causal stories allow for the elaboration of prevention strategies, they also implicitly identify who to blame for the epidemic's consequences. By singling out individual behaviour, the dominant explanatory paradigm exonerates public health authorities and contributes to the political domestication of HIV/AIDS. Far from being politically neutral, the resonance of these explanatory causal stories and their translation into prevention measures is an integral part of the national political process. What is at stake is a complex compromise between the necessary appeal to individual responsibility and the political side-effects of over individualized etiologies that disfavour structural change.

Presenting author email: moritz.hunsmann@eheess.fr

WEPE0928

Engaging national human rights institutions in national HIV responses
S. Jensen, L. Cordoba, L. Nyknæs-Rettorali, A. Nkot, B. N'Daw

Danish Institute for Human Rights, Copenhagen, Denmark, 2Defensoria del Pueblo de Peru, Lima, Peru, 3UNAIDS, Geneva, Switzerland, 4OHCHR, Geneva, Switzerland, 5UN Development Programme, Dakar, Senegal

Issues: National Human Rights Institutions (NHRIs) can contribute substantially to the protection of human rights in the context of HIV. Depending on their mandate, NHRIs can: monitor human rights situation in their country; conduct information campaigns; build human rights capacity of different stakeholders; review national legislation on human rights; advise the State on the implementation of its human rights obligations; handle individual complaints or even initiate investigations into human rights violations without a formal complaint being lodged. National human rights institutions are therefore important stakeholders in national AIDS responses that remain largely unexploited.

Description: A series of regional HIV workshops for NHRIs took place during 2009 and 2010 (East and Southern Africa, West and Central Africa, Latin America and Asia). The regional workshops were part of the efforts to operationalise the UNAIDS/ OHCHR Handbook on HIV and Human Rights for National Human Rights Institutions and intended to encourage these institutions to become active partners in promoting rights-based responses.

Lessons learned: NHRIs function between the State and civil society and often have a far reaching mandate to protect and promote human rights in the national context. By integrating HIV into their activities, NHRIs have a great potential to strengthen national HIV responses. The workshops allowed the participating NHRIs to gain a better understanding of HIV-related human rights, share lessons learnt, develop action plans on HIV, establish links with key populations and initiate regional collaboration on HIV and human rights.

Next steps: To adequately integrate HIV into their functions, NHRIs need to engage further with PLHIV, key populations and National AIDS Commissions; train staff on HIV and human rights; and share lessons of good practice. National stakeholders in the response to HIV should seek the support of NHRIs, and development partners should provide assistance to NHRIs to strengthen their work on HIV-related human rights.

Presenting author email: sjoe@humanrights.dk

WEPE0929

HIV in the workplace: a model for scaling up

CARE, UNAIDS, Quito, Ecuador

Issues: During a study of the Private Sector (PS) in Ecuador, high-levels of discrimination towards HIV-positive people were found, as well as misconceptions about transmission in the workplace. Business leaders felt that positive people were a threat to the health of their employees.

Description: A number advocacy and training sessions were held with 470 representatives of different business and trade associations and directors and associations of banana, cocoa exporters, banks & private clinics in order to understand
WEPE0930

Acceptance and participation of people living with HIV in Serbian society: strengthening of the capacities of PLHIV, supporting self-help groups of PLHIV with the back up of Team of National Experts and Parliamentary Group on HIV/AIDS to influence national debate and legislation on HIV/AIDS

D. Bankovic

GZAS, Belgrade, Serbia

Issues: Organizing local self-help PLHIV groups, connecting them into a National Association of PLHIV and promoting tackling discrimination and stigma, offering them the opportunity to speak freely and openly about their status, improving the living standards of PLHIV and ensuring effective access to prevention and treatment. At the same time providing support and maintaining support of team of experts and members of the Parliament.

Description:
1. Participation of PLHIV is the basic principle. The mobilization, participation and lobbying by PLHIV for improved rights is the key to the success and sustainability of this project. PLHIV groups get trainings focusing on organizational management and development, lobbying and advocacy, and AIDS education.

2. Formation of a National AIDS Expert Group which provides advice in the debate and development of public health legislations. This group of prominent experts with various backgrounds serves as agents for improving legislations and raising public awareness about the human rights of PLHIV.

3. Formation of a Parliamentary Group on HIV/AIDS within the National Assembly of Serbia

Lessons learned: Somewhat inconsistent development of PLHIV organizations throughout Serbia is greatly improved by trainings. Greater involvement of PLHIV supported by the expert team and group of nine MPs increased public awareness about the human rights of PLHIV.

WEPE0931

Improving rural HIV/AIDS interventions through the use of the local government structures: key lessons from Rivers state, Nigeria

P. Nnirim1, O. Ezrie1, C. Okhe1, G. Eber1

1Rivers State Action Committee on AIDS, Port Harcourt, Nigeria, 2Society for Family Health, Abuja, Nigeria

Issues: The difference in prevalence rates in rural and urban centres is often marginal, and in some states, including Rivers state, rural sites have prevalence rates higher than urban. While the relative proportion of infected cases is growing in rural areas, interventions are mainly concentrated in urban areas. This gap desperately needs an innovative intervention to improve programming by using local government structures.

Description: A situation analysis of HIV/AIDS intervention programmes in randomly selected LGAs was conducted in Rivers state. Capacity gaps were identified ranging from inadequate programming skills, poor motivation of LGA HIV focal persons and lack of support from local government authorities. Heads of health departments and HIV/AIDS focal persons in each LGA were consequently trained in collaborative communication, programme design and implementation, and data management. LGAs were then re-trained in groups of 8-10 person focus groups of communities and target groups reflecting the demographics of the community. Periodic reviews were conducted and data obtained was fed into the state M&E database. Outstanding LGAs received financial support.

Lessons learned: With the use of existing local government structures, programmes can be extended to rural communities. Acceptance and ownership of the programme is deepened when LGA heads participated in the training programmes. Capacity building leads to multiplier effects as skills acquired can then be cascaded for other health intervention areas such as maternal and child health. Including an element of reward can lead to healthy competition among LGA focal persons, improving programming.

Next steps: The use of LGA structures can facilitate rural interventions and should be taken advantage of for the development of tailored manuals and mentoring programmes which will facilitate prevention efforts.

Presenting author email: ccphoto@fhi.org.ng

WEPE0932

Mainstreaming HIV across government, civil society and business sectors enhances social benefits for PLHIV: a case study from Northern India

L. Ramakrishna1, K. Gautami1, N. Mohammed2, A.K. Srivastava1, P. Mohanpuri1, R. Khatri1

1Solidarity and Action against the HIV Infection in India, Programs and Research, Chennai, India, 2Solidarity and Action against the HIV Infection in India, Jaipur, India, 3Solidarity and Action against the HIV Infection in India, Hyderabad, India, 4Rajasthan State AIDS Control Society, Jaipur, India

Issues: A situational analysis of India’s National AIDS Control Program II (1999-2006) revealed the need for involvement of nationalized business and civil society in the national response. The current plan (NACP-III: 2007-2012) launched initiatives to mainstream HIV in policy and programs of non-health departments of the government, and business and civil society sectors not traditionally concerned with HIV. Key outcomes and impact of the mainstreaming approach are presented for the state of Rajasthan.

Description: The Rajasthan mainstreaming project was initiated in late 2007 by the state government AIDS control society and civil society partner SAA-THI, with support from NACO and UNDP. Mainstreaming strategies included sensitization of departmental and organization heads on the need to consider HIV issues in their domains of work, and advocacy towards pro-PLHIV policies and programs. Trainings to staff covered HIV basics, and mainstreaming strategies appropriate to their programs. A total of 2499 individuals from government departments, business and civil society organizations were trained and motivated to include PLHIV in their activities.

Lessons learned: A mid-term evaluation of trainees (sample N=619) showed high retention of knowledge on HIV and positive attitudes towards PLHIV. Key pre-PLHIV policy changes of the government resulting from the mainstreaming included (i) modified eligibility criteria for widow pension, benefitting 633 AIDS widows (ii) eligibility for a health scheme to avail free medical and laboratory tests (iii) amendment of a child protection scheme to benefit HIV infected and affected children with nutritional, informal education and vocational training. HIV/AIDS was included in training induction trainings of five government departments. Business-sector and civil society initiatives have established inclusion of a counseling and testing centre, condom outlets, and two migrant information centers providing HIV referrals.

Next steps: Based on lessons learned, PLHIV empowerment activities should focus on addressing pre-PLHIV policies, multi-sectoral stigma-reduction responses and widespread accurate knowledge of HIV/AIDS.

Presenting author email: Ramakrishna2004@gmail.com

WEPE0933

Organisational quality and accountability for civil society responding to HIV/AIDS

A. Bacha1, T. Bagasa2, R. Cabello3, C. Calica4, T. Pearcy5, L. Saloucou6, L. Ramakrishnan1, K. Gautam2, N. Mohammed2, A.K. Srivastava2, A. Anand7, A. Peter8

1International HIV/AIDS Alliance, Global Alliance Services, Hove, United Kingdom, 2NAIDS, Manila, Philippines, 3VIA Libre, Lima, Peru, 4PHANUS, Phi,ippines, 5International HIV/AIDS Alliance, Brighton, United Kingdom, 6IPC, Ouagadougou, Burkina Faso, 7International HIV/AIDS Alliance, Kunming, China

Issues: Civil Society Organisations responding to HIV/AIDS need to ensure they provide high quality programmes and are accountable to communities, donors and governments.

Description: The International HIV/AIDS Alliance has introduced an Accreditation system by which organisations conduct peer assessments against performance standards around governance, management and programmatic issues. Assessments are designed to identify weakness areas which are addressed by tailored technical support provided by CSO experts from the regional support hubs. Accreditation system should also build donors confidence that CSOs deliver quality programmes. The cornerstone of these standards is the Code of Good Practice for NGOs responding to AIDS which sets out guiding principles applying a human rights approach. Since 2008, 17 organisations have been assessed in Africa, Asia and Latin America of which 13 have been accredited.

Lessons learned:

Key standards developed through a participatory process (by a working group from 8 countries) reflect the performance of CSOs as intermediary organisations supporting Communities.

Identification of a comprehensive set of criteria used as indicators of compliance with specific standards. Organisations assessed against 38 standards covering a wide range of areas: organisational systems, finances, governance, programming, humanrights, gender, ethics and principles including GIPA, gender, key populations

A self-demanding approach to working in partnership with other organisations to enhance its performance, applying quality standards, constantly seeking to upgrade its systems/programmes is more credible if holding governments/donors to account and in playing a role in the policy dialogue.
Next steps: 12 assessments are planned per year. Accredited organisations are encouraged to carry out a self-assessment every two years. Periodic evaluations will ensure lessons learnt are incorporated into the development of the programme. Tailored technical support is developed for each organisation that undergoes an Accreditation review to address identified weaknesses and form part of its Integrated Development Plan.

WEPE0934

Changing strategy of intervention: who to decide?

O. Kam,a) R. Tambunan,a) R. J. S yafth,b) H. Hadic)
a) Atma Jaya University, AIDS Research Center, Jakarta, Indonesia, b) Atma Jaya University, Pusat Penelitian HIV/AIDS, Jakarta, Indonesia, Family Health International, Indonesia, IDU Unit, Jakarta, Indonesia

Issues: Needle syringe program (NSP) has been implemented since 5 years ago in Indonesia by Non Government Organization. Integrating HIV/AIDS related services into existing health system is important to improve accessibility and to ensure sustainability. Since couple years ago NSP has been integrated into primary health care (PHC) service in some provinces. There are different opinions about whether NGO should still distribute needle on their activity or NSP should only delivered through PHC. There is tension among program implementers, between government agency and civil society. It could put the program at risk.

Description: Intervention data, program reports, discussion with activists, and result from existing research have shown different effectiveness of NSP through different channels. Most of Injecting drug users still feel uncomfortable to access needle through PHC. The environment is perceived as not friendly by some others. For quite a long time IDU have been receiving syringe and other prevention materials from nongovernmental workers in easy and accessible manner. Intervention data shows big difference on number of clients getting needle, the number of needle distributed. Most clients feel more comfortable to receive syringe and other materials from NGOs. However, the PHC has to support the environment to be more friendly - are needed.

Next steps: Integration HIV prevention program and health services into PHC sounds promising. The new strategy should be based on a strategy which is proven work and successful. There should be systematic study to evaluate the effectiveness of the new strategy and to develop strategy based on evidence. Civil society participation need to be considered on the decision making process.

Presenting author email: ayahikeren@yahoo.com

WEPE0935

Partnerships between the state and civil society in Brazil: case study of São Paulo state - challenges for universal access to STD/AIDS prevention in the public health system

R. Barboza
Health Institute, São Paulo, Brazil

Background: In Brazil, health is a constitutional right and the National Health System must ensure universal access to prevention and treatment of STD/ AIDS. The transfer of responsibilities in the management of primary health care and prevention of STD/AIDS for NGOs in 90s decreased the social control of public health systems and reduced prevention materials from outside workers in easy and accessible manner. Intervention data shows big difference on number of clients getting needle, the number of needle distributed. Most clients feel more comfortable to receive syringe and other materials from NGOs. However, the PHC has to support the environment to be more friendly - are needed.

Methods: Developing eight interviews with managers from the three governmental levels and NGOs during the transition loans for AIDS established by the Health Ministry and the World Bank (1994 – 2002).

Results: The partnership had increased prevention activities in the country and the State of São Paulo. However, it presents inequalities in different regions. The World Bank’s policy contributes to decentralization of preventive actions for NGOs. The NGOs though have developed successful experiences, have reached few people in projects with low sustainability and funded entirely with public funds. This situation definitely the universal access to prevention in the National Health System. It was observed different views between local governments and NGOs, when STD/AIDS are not prioritized in the municipal health. Best practices were observed when NGOs were not focused only in the project financing.

Conclusions: The decentralization of AIDS prevention actions to the NGOs has reduced the role and responsibilities of the public local staff, differentiating the universality of health care, currently. São Paulo State, Brazil.

Program is investing on the training of local teams specialized in preventing and human rights to change this situation and increase the sustainability of prevention policy.

Presenting author email: renato@isaudpe.sp.gov.br

WEPE0936

From Westphalianism to global health governance? A critical examination of opportunities and challenges in public-private partnerships

Y. Long
University of Michigan, Sociology and Women’s Studies, Ann Arbor, United States

Background: It is widely accepted that global health governance (GHG) emphasizes inclusive participation for policy effectiveness as a response to the failure of the Westphalian governance. If the Westphalian system is predominantly state-centric, do public-private partnerships (PPPs) fill the accountability gap by including nongovernmental organizations (NGOs) as representatives of civil society? GHG literature has studied the roles and structures of global PPPs in the HIV/AIDS sector; yet much remains to be understood about the mechanisms through which PPPs are translated into local practices. This paper examines the effects of global PPPs on interactions between the state and civil society and relationships within civil society. It focuses on the Global Fund to Fight HIV/AIDS, TB, and Malaria (GF), one of the most influential new GHGs.

Methods: The first part presents a quantitative analysis of approved and rejected proposals and grant performance reports of 140 countries for GF from 2002 to 2009. The second part is based on four months of ethnographic fieldwork in China.

Results: The first part analyzes the legitimate characters of local organization actors as defined by global PPPs. It explains how the GF - driven by depoliticized administration and technical policy rationality – legitimizes certain concepts and functions of NGOs while excluding others. The second part uses China as a case to demonstrate the GF’s role in the building and expansion of NGOs in a semi-authoritarian regime. This process has dual consequences: HIV/AIDS issue has opened a space for transnational activism while the state is tightening control over the NGO boom and cross-border interactions among organizations and activists since 2003. However, this space has excluded those who do not fit in the NGO category identified by GHG and created a new hierarchy among different groups affected by AIDS.

Conclusions: This paper suggests some institutional practices to address structural weaknesses in current PPPs.

Presenting author email: longyan@umich.edu

WEPE0937

Improving meaningful participation of communities in national level decision making process

H. Perez Vazquez,a) J. A. Izazola,b) C. García de León,c) J. M. Alvarezd)
a) CENSIDA (Natl. AIDS Program), Prevención y Participación Social, México, Mexico, b) CENSIDA (Natl. AIDS Program), Dirección General, México, Mexico, c) CENSIDA (Natl. AIDS Program), México, Mexico

Issues: It recognized the fundamental role of civil society and people from key populations in the response to HIV and AIDS epidemic, but seldom engage and strengthen efforts to promote meaningful participation, recognized and articulated between the company itself civil and between it and other actors.

Description: Mexico has diverse areas of proposal and decision to include the participation of civil society and key populations. In addition to the State Councils of HIV / AIDS, some of the most important are the UNAIDS Theme Group, the Country Coordinating Mechanism (CCM-MEX) and the National AIDS Council- NAC (CONASIDA).

It was identified that there was a breach in the rules of civil society participation: lack of rotation of representatives, contested selection procedures, lack of representation of the same representatives and as a result of all this disagreement between sectors of civil society. The National AIDS Program called for a Civil Society Convention Organization working in HIV / AIDS. However, the process of election of delegates and observers from the same number of organizations, with presence of 27 of the 32 states of the country. Objectives were discussed, requirements, responsibilities and profits for participation in each space. Attendees will define and implement a transparent and democratic process that resulted in electing representatives and alternates to the MCP-MEX; for the UNAIDS theme group and the NAC. People choose to receive a training course in which they started strategic plans for advocacy of civil society in such spaces.

Lessons learned: Strengthening civil society includes providing opportunities for participation, coordination and planning that include advances in representation, grassroots consultation, accountability and strategic alliances with other actors in the response.

Next steps: The selected representatives and partners are recognized by the government sector and other stakeholders; along with them will ensure compliance with clear rules in favor of a participatory and democratic involvement.

WEPE0938

Social participation on health and mobilization: the influence of HIV discourses on health rights in other areas of public health in Peru - Peruvian HIV/AIDS economic flows and mobilization study

C. Sandoval, C. Cáceres
Universidad Peruana Cayetano Heredia (UPCH), Unidad de Salud, Sexualidad y Desarrollo Humano, Facultad de Salud Pública, Lima, Peru

Background: The structure of the public health sector in (PHS) offers limited space for participation of affected communities. Peru has been able to receive financing from the Global Fund (GF) in part thanks to the mobilization of HIV Peruvian civil society organizations (PCSO). Therefore, a partnership between...
WEPE0939
GIPA is the basis for a successful organization of PLWHIV in Ukraine
Network of people living with HIV/AIDS (AUKN)

I. Blakharzhskyi,
V. Zhovtyak,
O. Hazziova,
A. Gubskaya

All Ukrainian Network of PLWHA, Regional Development Team, Kyiv, Ukraine

Issues: AUKN has a 10-year history of development. It was established by HIV-v+ in 1999 and is now a national and international advocate of PLWHA. Its rapid development and a unique structure of 24 regional branches with 800 professional and members, is a model of networking for PLWHA and GIPA in local, national, and regional institutions.

Description: The main guiding documents (statute and policies) of AUKN are based on the GIPA principle. Each one contains sections, emphasizing the role of PLWHA. As an example, Coordination Council (its governing body), consists of 7 out and public PLWHA. The Regional Development Unit (RDU) of the AUKN is key to developing leadership and capacity building. Its PLWHA officers conduct regular mentoring visits into the field to address issues and advise the initiative groups and organizations on GIPA. An individual development plan if made to address the regions needs and the RDU ensures the establishment and development of new structural units. Regular trainings are conducted on advocacy, working with decision makers, and leadership skills.

Lessons learned: People is an important component of the organization's success and maintenance of the leading position in the fight against HIV/AIDS. The organization has a unique role as advocate; it has created an environment for 300 PLWHA to take different positions from social worker to the directors of the department. We have trained 70 PLWHA leaders from regions, established 11 initiative groups, established a team of 3 PLWHA and conducted more than 60 mentoring visits.

Next steps: To continue our work and involve PLWHA is all regional institutions involved in the epidemic in Ukraine.

Presenting author email: yanik@network.org.ua

WEPE0940
Strengthening multisectoral leadership and engagement on HIV/AIDS in Vietnam: evidence from an evaluation of AIDS policy training in six provinces

J. Messeresmii,
H.B. Tran,
Q.T. Truong,
D. Montague,
H. Le,
K. Ellifer,
A.L. Simp,
B. Tuchman,
V.A. Le

1Boston University School of Public Health, International Health, Boston, United States
2Institute of Health Policy and Planning, Hanoi, Vietnam
3University of California San Francisco (UCSF), Epidemiology and Biostatistics, San Francisco, United States
4USAID, Washington, United States
5Women's International Network for Guatemalan Solutions, Antigua, Guatemala
6Management Science for Health, Boston, United States

Background: Vietnamese and US-based faculty trained over 400 Vietnamese provincial leaders in the determinants and impacts of HIV/AIDS; integration of human rights, gender and GIPA; best practices in prevention, treatment, and care; and program implementation. The evaluation of the AIDS policy training have demonstrated improved knowledge among trainees. Based on the trainings, the implementation of actual policies and programs. Boston University and Hanoi School of Public Health addressed this gap through a qualitative cross-over comparison study to evaluate the impact of AIDS policy training in six provinces.

Methods: Study provinces were divided into two groups: three provinces were trained in July 2006 and the remaining three provinces were trained in June base line 2006, in December 2006, and in July 2007. Methods included in-depth interviews with 229 trained cadres, 159 of their staff, 111 peer educators, and 14 NGO program managers and 17 focus groups with PLWHA.

Results: Data were coded and analyzed using domain analysis methods. After training, policy makers and community leaders have become more open and human rights into policies and programs; decreased association of AIDS with stigmatization and discrimination; and improved collaboration between sectors. Peer educators and PLWHA reported greater access to needles, syringes and condoms, improved program conditions, and increased PLWHA involvement as peer educators. The study also found continued tension between police and public health regarding harm reduction programs; improved scores among the police six months after training; and decrease in police use of sadism during training.

Conclusions: AIDS policy training improves policy makers to design and implement effective multi-sectoral AIDS responses. Additional investment is needed to operationalize human rights, gender and GIPA and to improve meaningful engagement of non-health sectors.

Presenting author email: mjesser@bu.edu

WEPE0941
From the local to the global: the advocacy of French-speaking HIV/AIDS NGOs on the reform of the structure and financing methods of the Global Fund (GF)

M. H. Kerrou,
S. Kabore,
F. Giard,
A. Manganeta,
K. Elboudrighi,
H. A. Rousset,
A. Pogue

1AIDES, Pantin, France
2IRAME, Ouagadougou, Burkina Faso
3Coalition PLUS, Pantin, France
4AUPC, Brazzaville, Congo
5Positive Generation, Yaounde, Cameroon

Issues: The proposals of two African countries; Cameroon and Burkina Faso (120,000 and 29,000 people waiting for treatment) were refused by the Global Fund’s round 9. In the medium-term, there were no plans to find themselves in an emergency situation because of lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Description: AIDS=, the largest HIV community-based organization in France, joined forces with its partners to maintain round 10 in 2010, organise a ‘catch up round’ at the beginning of 2010 for those who are in health crisis; they find themselves in an emergency situation because lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Issues: The proposals of two African countries; Cameroon and Burkina Faso (120,000 and 29,000 people waiting for treatment) were refused by the Global Fund’s round 9. In the medium-term, there were no plans to find themselves in an emergency situation because of lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Description: AIDS=, the largest HIV community-based organization in France, joined forces with its partners to maintain round 10 in 2010, organise a ‘catch up round’ at the beginning of 2010 for those who are in health crisis; they find themselves in an emergency situation because of lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Description: AIDS=, the largest HIV community-based organization in France, joined forces with its partners to maintain round 10 in 2010, organise a ‘catch up round’ at the beginning of 2010 for those who are in health crisis; they find themselves in an emergency situation because of lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Description: AIDS=, the largest HIV community-based organization in France, joined forces with its partners to maintain round 10 in 2010, organise a ‘catch up round’ at the beginning of 2010 for those who are in health crisis; they find themselves in an emergency situation because of lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Description: AIDS=, the largest HIV community-based organization in France, joined forces with its partners to maintain round 10 in 2010, organise a ‘catch up round’ at the beginning of 2010 for those who are in health crisis; they find themselves in an emergency situation because lack of funds. Consequently, NGOs from these two countries took the leadership of an unprecedented mobilization, directly aimed at the board of the GF (November 2009).

Results: Concerning cancer, NGOs demand ACOs participation in decision-making processes; the educational sector requires recognizing the participation of affected communities; and 14 NGO program managers and 17 focus groups with PLWHA.

Lessons learned: Advocacy based on a structural proposal enabled us to learn how the Global Fund works, to build partnerships with the board representative and with the authorities in the countries, to raise the awareness of community-based actors and the public on what is at stake in the reform of the structure of the GF and the renewal of GF funds in 2010.

Next steps: We must go on with our lobbying in 2010, call on Eastern African leaders to take a public stand on the renewal of GF funds. Call on health ministers from the West and Central African countries to meet with civil society to discuss the Global Fund’s reform and take on a joint position.

Presenting author email: mkerrou@aides.org

WEPE0942
Improving joint advocacy between sexual rights and HIV/AIDS movements

M.B. Bianco

Strategies from the South; International AIDS Women Caucus -IAWC-; Fundacion para Estudio e Investigacion de la Mujer -FEIM-,

1World AIDS Day, 2010, Buenos Aires, Argentina

Issues: Traditionally the Sexual and Reproductive Rights (SRR) movement and especially women’s and youth activists have not been associated with the AIDS movements. They develop their advocacy separately rather than together, which has made their efforts less effective.

Description: Based on the hypothesis that joint advocacy will improve results, in 2006 a project began in Africa, Asia and Latin America and the Caribbean. It brings together international and regional networks from the Sexual Rights movements, including Human Rights and women’s and youth activist networks, and the HIV/AIDS movement: PLWHA, LGBT, sex workers and people who use drugs. Women’s movements are part of networks: face-to-face and virtually— to identify consensuses and differences on key issues concerning Sexual Rights and HIV/AIDS. The consensus reached allowed members of 42 networks to agree on a joint advocacy agenda to improve their impact on the sexual rights field in the long-term.

Lessons learned: The lessons learned that consensus could be built, recognizing the strength of numbers but also that reaching agreements is possible, but that the power of numbers is sometimes hampered by the slow mobilization of resources. The lessons also learned that consensus must be built, recognizing the challenge of articulating different discourses in HIV/AIDS and gender/sexuality into a shared vision. The lessons also learned that strategies put to put their interests together in order to make them stronger and more effective. Cultural and religious issues affecting the responses to the epidemic were addressed. They applied these strategies to find a balance between the leadership of NGOs and local communities. They applied these strategies to get the HIV/AIDS movement to work together and take on a common agenda.

Next steps: They must go on with our lobbying in 2010, call on Eastern African leaders to take a public stand on the renewal of GF funds. Call on health ministers from the West and Central African countries to meet with civil society to discuss the Global Fund’s reform and take on a joint position.

Presenting author email: mbianco@aides.org
WEPE0943

SHARPening our focus: improving access to care, building and maintaining community capacity, and forging broad coalitions in the Southern United States

R. Greenwald1, A. Rosenberg2

1Harvard Law School, Legal Services Center, Jamaica Plain, United States, 2Treatment Access Expansion Project, Boston, United States.

Issues: Southern states have been hit hardest by the HIV epidemic in the US. Throughout the region, significant barriers to accessing healthcare exist. While HIV-burdened nations like Botswana boast antiretroviral treatment coverage of 89%, nearly 70% of people aware of their HIV+ status in Arkansas are not in care. This abstract describes a policy-based research initiative to build sustainable grassroots advocacy infrastructure for HIV/AIDS in the southern US.

Description: The State Healthcare Access Research Project (SHARP) is a collaboration between Harvard Law School, the Treatment Access Expansion Project, and state-based partners, focused on reducing barriers to care. SHARP targets building advocacy capacity and facilitates sharing of effective strategies among states. SHARP develops coalitions of stakeholders from inside and outside the HIV/AIDS community: providers, consumers, government, academics, and business. Project staff and community partners identify successful strategies for improving healthcare access. One coalition identified throughout the South is inadequate state funding for HIV/AIDS. With SHARP’s efforts, $7.7 million of the Alabama governor’s budget was appropriated for HIV/AIDS, preventing 30% of medication assistance beneficiaries from losing coverage.

Lessons learned: Facilitation from neutral “outsiders” encourages diverse stakeholders to participate and catalyzes change. At the same time, emphasizing local “ownership” of the process and product builds community capacity and long-term sustainability.

Next steps: Endavors in six southern states reveal that SHARP should continue to build evidence-based coalitions through the differences in cultural norms and expectations creatively. SHARP must tap stakeholders from outside the HIV/AIDS world, as barriers to care affect populations, and diverse coalitions are more likely to succeed.

Presenting author email: rgreenwald@law.harvard.edu

WEPE0944

Building and working with leadership of people who use drugs

O. Beliyava

Club - Shans, Sumy, Ukraine

Issue: In 2004 buprenorphine became available in Ukraine, followed by the introduction of methadone in 2008. Today nearly 5,000 people are receiving opiate substitution treatment (OST). However, the legislative framework regulating OST provision in Ukraine remains rigid and patients are often left at the mercy of the substitution-making process during their health and treatment regimens. Doctors control decisions regarding dosage, waiting lists, and patients’ ability to travel or receive their treatment at convenient times.

Description: At the end of 2008, a group of patients came together to form a national network of OST advocates, comprising patients and other supporters of OST, including sympathetic doctors and parents. Called the All-Ukrainian OST Patients Association, it aims to give patients a greater voice in decisions regarding OST, both locally and in national legislation. They’re working to make the health care system more transparent, accountable and responsive to the needs of the patients.

Process and outcomes: To date, the Association is a group of volunteers representing 24 regions in Ukraine who function through a list-serve and regional visits to OST sites. While the network is in its early stages of development, its goals include monitoring and documenting cases of police abuse of patients and doctors, as well as documenting evidence in order to advocate for sustainable OST provision (e.g. OST-based collaborations, allowing use of OST in the presence of journalists).

Lessons learned: The patients movement is the single greatest advocacy force behind sustainability and institutionalization of substitution treatment in Ukraine. The experience will share insights about forming a national patients’ association, the challenges of such a model, and her thoughts about replicability.

Presenting author email: zd.p.ukraine@gmail.com

WEPE0945

Strengthening evidence-based community advocacy in HIV prevention research: the case of the AVAC-GCM HIV prevention research advocacy fellowship program

H. Chatani1, A. Kaggwa2, E. Bassi3, P. Irungu4, N. Barnabas5, D. Barrett6

1AVAC: Global Advocacy for HIV Prevention, New York, United States, 2Global Campaign for Microbicides, Nairobi, Kenya, 3Global Campaign for Microbicides, Johannesburg, South Africa.

Issues: With the majority of HIV prevention research trials and trial participants based in the Global South, it is imperative that global prevention research advocacy is rooted in local priorities. Yet there are few resources to support local advocates and networks. This identified need guided the development of the “AVAC-GCM HIV Prevention Research Advocacy Fellowship” in 2009. The program's goal is to expand capacity of civil society advocates and organizations, especially in the Global South, to monitor, inform and advocate around HIV prevention research; and to increase the cadre of skilled advocates who can contribute to setting the prevention research agenda.

Description: The Fellowship was designed to attract interest in HIV prevention research advocacy and/or the rollout of HIV prevention options. Applicants identified a priority area and local host organization, and developed a project to fill a critical gap. A broad call for applications was launched in May 2009. 112 applications were reviewed by an independent committee of various stakeholders.

Lessons learned: Nine inaugural Fellows were selected, from: Kenya (1), Malawi (1), Rwanda (1), South Africa (2), Uganda (2), and Zimbabwe (2). Within the first nine months, Fellows completed work-plans, needs assessments and project implementation phase. This presentation will focus on innovative approaches identified and challenges faced by Fellows in addressing gaps in prevention research advocacy. The session will highlight Fellows’ projects, including monitoring and engagement during the trial life cycle, developing media training across technologies, engaging national stakeholders around trials and bolstering the capacity of HIV advocacy campaigns to integrate research into policy and practice.

Next steps: The Fellowship has helped identify gaps and opportunities in community advocacy in HIV prevention research. Much needs to be done to secure additional resources to support grassroots advocacy, in addition to devising tools to measure ongoing impact on the nature and quality of research conduct.

Presenting author email: manju@avac.org

WEPE0946

Disclosure of a person’s HIV status is of importance both for the individual and the community. Before talking about public action, young people in particular have to be trained in handling the media. 12 golden rules

D. Bretscher, L.G. Jaulin

European Youth Conference Group Aids & Kind / Aids & Child Switzerland, Zürich, Switzerland

Issues: The powerful role of the media in establishing social norms and influencing public opinion, coupled with their importance in the daily lives of young people, demonstrates how they can act as a positive tool in promoting HIV awareness or as a negative factor that causes both personal and social damage. In the context of such a sensitive and stigmatized issue, we have to be careful and circumspect when working with the media.

Description: The role of journalists in print and on-air media, the aims they may have for writing their stories and the various types of stories media have been known before making statements to media representatives. Therefore, intensive training and careful preparation are essential beforehand. Especially young people must have self-confidence when in the presence of journalists. Furthermore, they have to make their own decisions.

Lessons learned: Many years of experience and participation in workshops at national and European meetings has done much to encourage some HIV+ youngsters to appear in the media. The 12 Golden Rules established at the “Sixth European Meeting of Young People affected by HIV/AIDS” are the basis for all media work.

Next steps: The new generation of HIV+ people is confronted with new media such as the internet, Facebook and other influential and interactive media. These people need even better preparation when dealing with journalists. Workshops and training tools have to be at their disposal.

Presenting author email: jaulin@daiskindchild.org

WEPE0947

Influence of Global Fund (GF) on the role and capacity of civil society organizations’ (CSOs) coalitions and networks in advocating for HIV related issues - a study in Georgia, Kyrgyzstan and Ukraine

D. Bogdash, A. Samien

National University of Kyiv Mohyla Academy, Kyiv, Ukraine

Issues: Emerging examples of united efforts among CSOs in Ukraine, Kyrgyzstan, and Georgia prove the fact that CSOs coalitions at country level might be an important way of challenging government policies on HIV/AIDS related issues. The previous studies suggest that GF grants have enabled CSOs to become more active in formal decision making bodies, although not without significant barriers to their effective engagement. GF HIV/AIDS grants

Abstract Book Volume 2 | www.aids2010.org
have also been used to support CSOs advocacy activities mainly focused on harm reduction prevention programmes such as opiate substitution therapy and needle exchange. The study looked at possible effects of GF on the changes in CSOs aims, roles and also on the changes of relationships between the CSOs.

Description: We present findings from a qualitative study on the effects of the GF on the roles CSOs in advocacy activities, focusing on the changes in aims and relationships aims and roles between advisory provision and tailored themselves to fit in GF HIV grants. Despite supporting capacity-strengthening activities GF grants had also undermined the advocacy-ability of CSOs by imposing service provision as primary role of CSOs. By encouraging CSOs to cooperate GF granted them to exercise greater influence on government HIV policies than CSOs working alone. Large injections of funding through major donors like GF creates not only need for coordination and cooperation but also rivalry and competition among CSOs.

Next steps: Sharing study results with CSOs representatives, GF principal recipients and governments is helpful to understand the role of GF in changing the role of CSOs in combating HIV/AIDS epidemic and to use the possibilities of strengthening the advocacy role of CSOs.

Presenting author email: daryna.boigian@gmail.com

WEPE0948

The LUKA principles for mobilizing communities that are targeting emerging, often mobile, populations

M. Vega1, C. Castro2, A. Spieldener1

1’Humanitarian Action’ St-NGO, SWAN, Saint Petersburg, Russian Federation, 2Planeta Salud, Institutional Development, Barcelona, Spain

Issues: HIV prevention with emerging (new) populations, particularly in rural communities, is challenging. Issues related to social capital, accessibility, stigma, economic disparities and fear can be present. This is further compounded by population-mobility and the demoralizing migration/immigration process. Currently, community mobilization practices are needed to adequately implement HIV prevention interventions, including social marketing campaigns, targeting emerging Latino populations. From 2000 to 2007, the Hispanic population within the US increased from 35.2 to 42.1 million, a 20.9% change. In the ‘Deep South’ region this positive trend has been more dramatic.

Description: The Latino Commission on AIDS developed a community mobilization approach to key stakeholders in the southern U.S. and to increase capacity to respond to the emerging population. The Commission conducted regional assessments meeting with service providers, health department officials, people living with HIV/AIDS, community advocates, academics, business owners, advocates and faith-based communities. The Commission implemented regional forums with key stakeholders to highlight findings and to further understand needs. The following were key findings: community distrust of official institutions, communities were compounded by stressful immigration experiences, officials and NGOs were concerned about emerging populations but did not know who to seek guidance from, what policies would be most helpful nor how to provide services with limited resources, local leaders were widely dispersed and not interconnected, and the development of action plans was perceived as overwhelming, considering the above-mentioned barriers.

Lessons learned: The Commission recognized that a framework for mobilizing populations to respond to emerging populations was needed. The Commission subsequently developed the LUKA principles, entailing: developing Local Leadership,Uniting stakeholders through coalitions, enhancing Knowledge on services with limited resources, local leaders were widely dispersed and not interconnected, and the development of action plans was perceived as overwhelming considering the above-mentioned barriers.

Next steps: Sharing study results with CSOs representatives, GF principal recipients and governments is helpful to understand the role of GF in changing the role of CSOs in combating HIV/AIDS epidemic and to use the possibilities of strengthening the advocacy role of CSOs.

Presenting author email: mvega@latinoaids.org

WEPE0949

Understanding the disincentives for political leadership on HIV prevention in Africa

P. Strand

University of Cape Town, Cape Town, South Africa

Issues: The paper argues that an important reason for poor political leadership on HIV prevention in Eastern and Southern Africa can be found in the lack of politically relevant incentives for politicians to champion the issue, given the nature of politics in the region’s frail democracies. Moral arguments from advocacy stakeholders are not enough. Unless we understand what political incentives are at play and through what governance innovations they can be accommodated, politicians will not provide the necessary leadership to ensure countries in the ESA region reach MDG goals and other prevention targets.

Description: The paper uses political science theory to identify the structure of incentives and disincentives that determine whether politicians in the ESA region decide to show leadership on HIV prevention. Politicians understand they need to show leadership in order to break stigma and help generate behaviour change and support for the epidemic. And yet few politicians do so. The main hypothesis is that the disincentives for leadership can be found in the system of patronage politics that structure political governance throughout much of the region.

Lessons learned: For politicians to actively champion messages that would make a difference in terms of sexual behaviour change is politically costly. The face of socially conservative constituencies and dependence on patronage politics, politicians too often choose to avoid investing their political resources by talking about AIDS in ways that would actively boost prevention efforts. The paper explores two forms of governance interventions. The first places prevention outside of politics by detaching the prevention agenda from electoral politics. The second places prevention at the centre of politics by suggesting M&E indicators that can secure political fortunes.

Next steps: The project is part of a current movement for prevention in the ESA region, seeking to receive endorsement by 50% by 2015.

Presenting author email: per.strand@uct.ac.za

WEPE0950

Policy makers, lawyers, human rights activists and political scientists roles and responsibilities

I. Maslivo1, 2, Sex Workers

1’Humanitarian Action’ St-NGO, SWAN, Saint Petersburg, Russian Federation, 2Humanitarian Action’ SWAN, St-Petersburg, Russian Federation

Issues: Sex workers in Russia are highly stigmatized, socially excluded and legally discriminated against. Marginalization of sex workers is deeply anchored legislative measures, in social attitudes but also in harm reduction, health promotion and HIV/AIDS prevention programs that often exclude sex workers, ignore sex workers’ agency and their expertise and thus instrumentalise and victimize sex worker.

Description: The UNFPA project “Strengthening the national potential of NGOs and NGDs who provide services to women of high-risk behaviour in the regions of Irkutsk and Chelyabinsk” is a good practice model regarding the involvement of sex workers as partners in prevention programs. Within the project, sex worker activists of the organizations “Humanitarian Action” and “Silver Rose” participated as experts. They had no interest in deciding on project partners, development and implementation of on-site sex work projects, evaluation of harm reduction programs, conducting awareness raising trainings for all the team members, conducting peer training for sex workers, creating a self-help and support groups for sex workers and, together with sex workers from St. Petersburg, Chelyabinsk and Irkutsk, publishing the newspaper “About Us and For Us”.

Lessons learned: Involving sex workers as experts and project partners at all stages of realizing the project, had effects on three levels: it demonstrated the willingness of UNFPA to implement inclusive projects, it demonstrated the readiness of sex workers to be an active part of such projects and it can be considered a successful project with an empowering outcome.

Next steps: The self-help group of sex workers still exists but lacks skills and resources. Language barriers make it difficult to participate in exchange and dialogue on a global level. Mentoring regarding project application and implementation is needed. Many international funds are not working in Russia. And sex work in Russia still remains criminalized.

Presenting author email: club.silver.rose@gmail.com

Evidence-based advocacy on budget and policy priorities

WEPE0951

The role of community advocacy to mobilize political support to global TB research and development in Spain

L. Ruiz Mingote, 1, G. Bochit Sanchez1, I, Benlloch Velar1, 1, Tallada Martinez1, 2, Planeta Salud, Institutional Development, Barcelona, Spain, 1Planeta Salud, Institutional Development, Barcelona, Spain, 2Planeta Salud, Institutional Development, Barcelona, Spain, 2Planeta Salud, Institutional Development, Barcelona, Spain, 1Consultant in Global Health, Barcelona, Spain

Issues: Tuberculosis is the leading cause of death among people living with HIV/AIDS worldwide. Comprehensive response is needed to decrease the burden of TB-HIV. We don’t have adequate health tools to face the TB pandemic globally: more effective tools are needed. Research and Development (R&D) is essential part of international cooperation policies.

Description: An advocacy strategy was implemented to include TB R&D in the agenda of key stakeholders in order to achieve political and economical support from the Spanish Government (SG). Key audiences identified: HIV/AIDS, Development NGOs and networks; SG Members (health and cooperation); Congress and Senate; Media; Researchers.

First stage: Raise awareness through direct contacts with key leaders. Meetings with 40 stakeholders; seminar on TB R&D; toolkits for politicians and media; official hearings in Parliament; wide dissemination of information tools.

Second stage: Activist proposals to TB R&D for key leaders. A Non-Binding Proposal registered into the Congress; “Call For Action” signed by 26 NGOs; second seminar on TB held with the participation of SG Senior Policy-Makers and a proposal for funding TB R&D submitted to SG.

Lessons learned: A detailed plan of actions is needed to mobilize wide, active support leading to political and financial support. Carefully selection of key audiences and the kind of relationship to establish is essential.

Advocacy efforts need a strategic framework where to incorporate the target (e.g. public good for global health).

Active networking is crucial. Advocacy and lobbying shouldn’t be implemented in isolation and require a hard work of collaboration with NGO’s and decision leaders.

Next steps: SG has declared its will to explore ways to support and fund TB R&D. Next target is obtaining local coalititon in 2010. To achieve the objectives of increasing awareness activities on TB R&D among Spanish stakeholders aiming at reaching broad community and political support need to be reinforced.

Presenting author email: lia@planetasalud.org

WEPE0952

The role of community advocacy to mobilize political support to global TB research and development in Spain

L. Ruiz Mingote, 1, G. Bochit Sanchez1, I, Benlloch Velar1, 1, Tallada Martinez1, 2, Planeta Salud, Institutional Development, Barcelona, Spain, 1Planeta Salud, Institutional Development, Barcelona, Spain, 2Planeta Salud, Institutional Development, Barcelona, Spain, 1Consultant in Global Health, Barcelona, Spain

Issues: Tuberculosis is the leading cause of death among people living with HIV/AIDS worldwide. Comprehensive response is needed to decrease the burden of TB-HIV. We don’t have adequate health tools to face the TB pandemic globally: more effective tools are needed. Research and Development (R&D) is essential part of international cooperation policies.

Description: An advocacy strategy was implemented to include TB R&D in the agenda of key stakeholders in order to achieve political and economical support from the Spanish Government (SG). Key audiences identified: HIV/AIDS, Development NGOs and networks; SG Members (health and cooperation); Congress and Senate; Media; Researchers.

First stage: Raise awareness through direct contacts with key leaders. Meetings with 40 stakeholders; seminar on TB R&D; toolkits for politicians and media; official hearings in Parliament; wide dissemination of information tools.

Second stage: Activist proposals to TB R&D for key leaders. A Non-Binding Proposal registered into the Congress; “Call For Action” signed by 26 NGOs; second seminar on TB held with the participation of SG Senior Policy-Makers and a proposal for funding TB R&D submitted to SG.

Lessons learned: A detailed plan of actions is needed to mobilize wide, active support leading to political and financial support. Carefully selection of key audiences and the kind of relationship to establish is essential.

Advocacy efforts need a strategic framework where to incorporate the target (e.g. public good for global health).

Active networking is crucial. Advocacy and lobbying shouldn’t be implemented in isolation and require a hard work of collaboration with NGO’s and decision leaders.

Next steps: SG has declared its will to explore ways to support and fund TB R&D. Next target is obtaining local coalititon in 2010. To achieve the objectives of increasing awareness activities on TB R&D among Spanish stakeholders aiming at reaching broad community and political support need to be reinforced.

Presenting author email: lia@planetasalud.org
Access to information, transparency and accountability

WEPE0952-WEPE0957

WEPE0952

Absence of multi-sectoral National AIDS Committee and non-transparency of national AIDS budgeting in 2009, Czech Republic

J. Jedicke1, B. Benes1, K. Benešová1

1Archimedes, Prague, Czech Republic, 2SNAID, Prague, Czech Republic

Issues: In 2007, the Czech Ministry of Health dissolved the multi-sectoral National AIDS Commission which was created in 1993, based on recommenda-
tions of the WHO Euro office in Copenhagen for the effective national AIDS response.

Description: Many informations related to AIDS management, policy and funding are not made public in the Czech Republic. In 2009, the civil society initiative called “Archimedes” has been created in order to reveal details about the National AIDS policy to the general public including PLWHAs. We started to use the law No. 106/1999 on public access to informations which enables citizens of the Czech Republic to obtain informations from government, public and municipal authorities. Using this law, we disclosed surprising details about the policy of the Czech Ministry of Health in the field of AIDS prevention. In 2007, the National AIDS Committee has been dissolved by the order No. 3/07 and replaced by the 9-member Commission consisting of 5 officers of the Czech MoH and 4 experts (epidemiology, information and sexuality education). No participation in this new body was omitted. The only one member of this body was also an NGO representative applying for AIDS funds. This NGO had an opportunity to influence funding for the NGO sector. The organisation led by him received 81% of all funds for the whole non-governmental sector involved in AIDS prevention on the national level, without any previous consultations with other NGO stakeholders.

Lessons learned: Non-transparency has been disclosed in the MoH Commission on AIDS which lead in 2009 to the disproportional funding of AIDS-related projects in the Czech Republic affecting seriously effective preventive strategies in the whole country.

Next steps: Renewal of multi-sectoral National AIDS Committee with the accountable participation of the civil society and PLWHAs should prevent non-transparent decision-making processes within the National AIDS Programme.

Presenting author email: jaredicka@gmail.com

WEPE0953

Budget advocacy and human rights: promoting the HIV/AIDS response through accountability and transparency

A.A. Sonoki1, O. Adeleke1, O. Onuoha1, D. Akani1

1Journalists against AIDS (JAAIDS) Nigeria, Lagos, Nigeria, 2Journalists against AIDS (JAAIDS) Nigeria, Policy and Advocacy Unit, Lagos, Nigeria

Issues: The global response to the HIV/AIDS epidemic requires a multi-sectoral and multidisciplinary approach. Resource tracking and expenditure analysis is a proven strategy to address donor-dependence and increase government accountability. Transparency. The 2010 appropriation bill has channelled Nigeria’s huge resources into capital expenditure of building houses for ailing nation leaders at the expense of providing food/agriculture, health, education and other basic/physiological needs which constitute the basic fundamental rights of every citizen. Suffice it to say, budget analysis is a viable tool in advocating the health rights of the average Nigerian.

Description: Journalists against AIDS (JAAIDS) Nigeria, supported by Ford Foundation aimed at strengthening National HIV/AIDS response through its MONITOR project by promoting accountability/transparency through budget-monitoring/expenditure-tracking of HIV/AIDS resources. This is achieved through budget researches, accountability discussion forums, media/community mobilization. Expenditure analysis of national HIV/AIDS spending FY 2006-2007 were carried out while civil societies/media were trained/mentored, which saw the births of budget advocacy networks in Nigeria’s oil-rich South-south as well as North.

Lessons learned: The research showed that total government allocations to health for years 2006 & 2007 were way below the Abuja 15% target despite being a major condition for Debt Relief Gains. Declines in allocations to HIV/ AIDS health expenditure include: 4.2% (2007) and 5.0% (2006). Expenditure was also observed. The inflated value of HIV allocations showed real growth rate of 1.19% while nominal value increased by a mere 1.0%. This is a reflection of the growth rate in the economy, according to budget-related information proved generally difficulty while budget literacy levels were low among stakeholders. The first state HIV/AIDS expenditure research was conducted by ITAN (a budget advocacy group mentored by JAAIDS) in Cross-river state, in collaboration with JAADS. Media advocacy coverage on budget-related issues have also reportedly increased.

Next steps: Promote advocacy/sensitization on active community participation in budget process, transparency/accountability on HIV/AIDS spending/allocations and passage of the freedom of Information bill.

Presenting author email: adojokosesonoki@gmail.com

WEPE0954

The right to know: expanding HIV/AIDS knowledge for practice (student) teachers, plus their students and schools in Swaziland

G.L. Lackey1, E.Z. Mazibuko1

1Tohomas Najips Bloom School of Public Health, International Health, Health Systems Program, Baltimore, United States, 2Examinations Council of Swaziland, Registrar, Mbabane, Swaziland

Issues: University students are in a continuing HIV/AIDS high risk population in Swaziland, requiring and benefiting from HIV/AIDS information. Knowledge they gain can be shared in and beyond the university where the epidemic seriously impacts all sectors including the broader education sector. With essential information, practice teachers can support the Right to Know about HIV/AIDS for themselves, their students, and generally in placement schools and schools where they later work.

Description: This student-driven education and public health initiative addresses information needs and access among both University of Swaziland students and students and others in schools where they practice teach. Through surveys and focus groups, education students report on 1) information and activities available to them at university and elsewhere, and what is needed; 2) what if any impact they anticipate HIV/AIDS might have in their practice experience; 3) circumstances they actually face regarding HIV/AIDS and information at placements; and 4) their resulting recommendations for preparation of teachers and supporting HIV/AIDS knowledge. 115 students completed pre-placement and infeld surveys; 18 students also participated in post-placement focus groups.

Lessons learned: University students report their own access to HIV/AIDS information is inadequate; they are unprepared for the impact of HIV/AIDS on girls, school functioning generally, and on their own school roles; schools vary in capacity to provide information and address implications of HIV/AIDS. Student recommendations address filling information gaps and updating, preparing practice teachers, and supporting the Right to Know and AIDS action. These findings and results can be of interest generally to universities and education sectors.

Next steps: Using student recommendations, training and materials have been developed with student input for the next cohort of practice teachers. These efforts will be evaluated at University and field levels to further guide this program.

Presenting author email: lynnelackey@hotmail.com

WEPE0955

Investigating participation levels in SANAC’s approach to HIV and AIDS

S. Veerapan

University of Witwatersrand, Public School of Development Management, Johannesburg, South Africa

Issues: Multi sectorialism is defined as a partnership formed amongst group representatives, individuals, and government. The South African National AIDS Council (SANAC) represents the multi sectoral model of HIV and AIDS in South Africa. In its existence just under nine years, SANAC has not managed to make any significant shift on the HIV and AIDS policy implementation process thus far.

Description: A qualitative case study method will be used to explore how and why discourses amongst vulnerable groups and women as social actors add to the complexities and contradictions within SANAC and its relationship with local structures, i.e. Local AIDS Councils. This paper explores how these technical issues relate to the broader debates on participation and development in an emerging democracy.

Lessons learned: The 2006 UNAIDS report noted that despite the involve-
ment of more social actors, the HIV and AIDS multi sectorial policy imple-
mentation remains formidable. According to the report, in 57 UNAIDS offices the whole society was not adequately included. Social actors that were in areas leadership, commitment, and engaging stakeholders. The re-
port acknowledged that these technical issues were real and some of the issues were discussed. This led to the process will be managed more effectively. In the majority of the cases the poor and marginalised groups, especially women, are most vulnerable. In the pre-
liminary study the participation levels are uneven and women struggle with their submissive role in tribal authority structures and in society in general. The national structures are underway but their impact is not yet felt at the grassroots levels.

Next steps: The main achievement for SANAC was moving from a dysfunc-
tional SANAC to a functional SANAC. However, the LACs are dysfunctional. Because participation at the local level is not broad based, policies are not necessarily evidence based and representatives are not fully accountable to the sectors they represent.

Presenting author email: s_veerapan@ab1samal.co.za

WEPE0956

Sharing of strategic information between civil society organisations and local governments is vital for effective and coordinated HIV/AIDS response

R. Mayanja1, S. Alege2, F. Ayi3

1Uganada Network of AIDS Service Organisations, Information and Documentation, Kampala, Uganda, 2Uganada Network of AIDS Service Organisations, Networking and Partnerships, Kampala, Uganda, 3Uganada Network of AIDS Service Organisations, Advocacy, Kampala, Uganda

Issues: Uganda Network of AIDS Service Organizations (UNASO), formed in 1996, is an umbrella organisation that coordinates and represents civil society organisations (CSOs) engaged in HIV/AIDS response in Uganda for collective response. UNASO coordinates over 1600 CSOs in 44 district networks.

Description: "An umbrella organisation that coordinates and represents civil society organisations (CSOs) engaged in HIV/AIDS response in Uganda for collective response. UNASO coordinates over 1600 CSOs in 44 district networks.

Next steps: This paper seeks to share experiences on sharing strategic information between civil society organisations and local governments. This is vital for effective and coordinated HIV/AIDS response.

Presenting author email: adojokosesonoki@gmail.com

Author Index

269
NEXT steps: With the Media Committee now established media houses will have developed HIV workplace policies; work with provincial media houses would be conducted in line with the sub national strategy program; incorporated HIV topics into the curriculum of journalism schools and universities; media houses would have a close relationship with research institutions, and government agencies that will conduct HIV studies, or release surveillance or monitoring and evaluation data.

Presenting author email: rkeaeke@nacs.org.pg

WEPE0957

Lights, camera, action! Improving media coverage of HIV and AIDS in Central Asia

G. Li

UNESCO Almaty Cluster Office, Education, Almaty, Kazakhstan

Issues: In Central Asia journalists are often indifferent to HIV and AIDS issues, using stigmatizing terminology; they fail to understand their own role in country response due to a lack of information material on HIV and AIDS. Media coverage of HIV and AIDS issues is predominantly addressed through news releases and press conferences. Coverage of key issues is often fragmented and lacks coherence. There is a need for better integration of these issues into everyday news reports and programming. Media practitioners require access to up-to-date information and guidance on key issues.

Description: The project activities included sessions on obtaining interesting and reliable sources of information on HIV and AIDS, gaining access to key populations and use of correct terminology. The project produced the first interactive training handbook in the region for media professionals. A sub-regional team of 15 media trainers was created to conduct fourteen interactive trainings.

Lessons learned: Using a team of trainers with media backgrounds was crucial to the success of the project. Providing media professionals with the opportunity to participate in the media trainings improved understanding of HIV and AIDS issues and the quality of media materials. Eighty health workers and journalists participated in the media trainings and went on to win a journalism contest devoted to World AIDS Day 2008 organized by the Central Asia AIDS Control Project (CAAP).

WEPE0960

Representations of XDR-TB in South African newspapers

H. Daku, A. Gibbs, S.J. Heymann

McGill University, Political Science, Montreal, Canada, ‘University of KwaZulu-Natal, South Africa, Health Economics and HIV/AIDS Research Division, Durban, South Africa, ‘McGill University, Institute for Health and Social Policy, Montreal, Canada

Background: The design and implementation of health policies are shaped by research, funding, networks and popular understandings of issues. In particular, the media is a key source of information for those who develop and implement these policies. In this study, we are interested in understanding how the media frames health issues by examining the case of XDR-TB in South Africa. Current research emphasizes XDR-TB’s close relationship with HIV/AIDS, a potential problem for South Africa, which has the largest reported cluster of XDR-TB infections in the world.

Methods: We examined content from 310 South African newspaper articles from February 2004 to July 2009. Using thematic network analysis, we categorized articles into themes, sub-themes, and thematic networks. The networks were constructed, explored, and patterned through a series of iterative steps. Results: The thematic network analysis identified two main dimensions: causes of XDR-TB and treatment approaches/solutions. Causes revolved around three sub-themes: i) costs of testing for XDR-TB, ii) institutional and structural barriers to xdr-TB, and iii) patient focused cases. Treatment approaches or solutions to tackling XDR-TB focused on: i) ensuring treatment of patients, ii) prevention of XDR-TB with an emphasis on adherence to first line medication, iii) patient targeted approaches (such as holding patients against their wishes), and iv) improved surveillance for XDR-TB.

Conclusions: Our analysis on a trend in South African media to identify a broad range of causes of XDR-TB, while emphasizing that treatment ap-
proaches should be directed at the individual. Such an emphasis is problematic for two reasons. First, framing patients as problematic leads to controlling, rather than empowering, approaches to treatment and proaches to treatment and prevention. Such a focus and discrimination against key populations.

Lessons learned:
- Media monitoring database as a tool for tracking strategic advocacy efforts

WEPE0963

Media monitoring database as a tool for tracking strategic advocacy efforts

A. Sivadas1, A. Pai1, D. Vinod Kumar2, S. Salluri3
1Centre for Advocacy and Research (CFAR), New Delhi, India, 2Centre for Advocacy and Research (CFAR), Chennai, India, 3Centre for Advocacy and Research (CFAR), Hyderabad, India

Issue: To mount a scaled up media advocacy effort, the Centre for Advocacy and Research (CFAR) needs a data base that captures the evidence being monitored across the six HIV high prevalence states. The database consists of 45392 news reports monitored across six states, 219 newspaper editions, 24 TV channels (2005 -2009). Fields of enquiry are descriptive (name of newspaper, edition, reporter, page) informative (theme, evidence, arguments, voice, message) and analytical (supportive, bias, negative).

Description: The data base has been shaped by daily practice and strategies used to advance media advocacy. In the initial phase the monitoring sought to analyse gaps, missing evidence and information. In 2005, a two month scan of 30 newspapers in Karnataka revealed that the coverage was event-centered and focusing on HIV surveillance (25 out of 70 reports). In Tamil Nadu, HIV was given space (1079 reports) but was not inclusive towards transgenders community (20 reports out of 1031 reports). In the next phase, monitoring focused on assessing opportunities, in district level language newspapers (28 in 2005, 119 in 2007-08) to facilitate greater coverage (38% increase in reports (2005 to 2006)). We monitored shifts in representation of key population. This increased from 76 (2005-06) to 764 (2008-09). By 2009, 39% of inclusive reporting on key population stemmed from the districts and focused on the role of sex workers in HIV prevention. These positive and informed reports assumed significance because we observed that problematic reports on trafficking implicating key populations such as sex workers rose from 499 (2005) to 1526 (2008).

Lessons learned:
- Use the tool to track policy commitments and its implementation; help shape locally relevant communication strategies; monitor stigmatization and discrimination against key populations.

Role of health providers and professionals

WEPE0964-WEPE0967

WEPE0964

Awareness about HIV/AIDS among health care providers (HCP) in the district of Solapur, Maharashtra, India

N. Vaidya, S. Kulkarni, A. Bahulekar, S. Darak

PROYAS, Health Group, Pune, India

Issues: Culturally in India HCPs are regarded as omniscient. HCPs beliefs and practices are considered as rational and based on scientific knowledge. HCPs influence or are most important primary source of knowledge for general populations. As a part of scaling up PMTCT program in a high prevalence district of Solapur a needs assessment encountered several misconceptions.

Description: Discussions with individuals (doctors (31), nurses (18), lab technicians (4), and grass root health workers (15)) revealed the following misconceptions:

1. HIV gets transmitted through mosquito bites, through barber’s blade or by the virus coming out of a dead person’s body etc.
2. HIV infected women live longer than men as HIV is reduced from their body through menstrual blood.
3. Mother-to-child transmission of HIV is 100% and is not preventable.
4. Diagnosis of HIV exposed babies can be done in the same way as adults, irrespective of age.
5. If husband is infected with HIV the wife has to be infected.
6. It is risky to provide care to known HIV infected individuals.
7. Creating fear about the disease is a way to control HIV transmission. Similar misconceptions were observed in the general populations.

Lessons learned: After more than 20 years in the epidemic, level of knowledge among HCPs is not adequate. It leads to discrimination during health service provision. Such misconceptions precipitate in general populations as they are endorsed by the HCPs. Awareness programs aimed at general populations which try to address these issues may become less impacting.

Next steps: With increased emphasis on universal access to HIV prevention and care services, there is an urgent need to work with HCPs to increase their knowledge levels. However, only working with HCPs will not help as misconceptions are rampant in general populations as well. Work would have to be done with different stakeholders.

Presenting author email: neha.vaidya19@gmail.com
WEPE0965
A successful intervention of reducing loss to follow up and improving patient retention
S. Sayana1, C. Carlotti2, H. Khanlou2
1AIDS Healthcare Foundation, Internal Medicine, Los Angeles, United States; 2AIDS Healthcare Foundation, Los Angeles, United States

Issues: Loss-to-follow-up is a major challenge facing HIV treatment programs globally. In 2008, WHO reported over 20% of patients were lost to antiretroviral therapy (ART) programs throughout Africa, Asia, and South America. During our 23 years of experience with providing HIV care and treatment in United-States, a method called the “104-day-report” has been developed and used. This method consists of generating a list of patients from our electronic-medical-record-system (EMR) that have not been seen for 104-days from their last appointment and having their provider call to ask them to make a future appointment. The efficacy of this method was evaluated and the data is presented herein.

Description: All unduplicated patients that were active at any time between January-August of 2009 and whose name appeared on the 104-day-report were included in the EMR. The data elements analyzed were: 1) what percent of individuals who were on the 104-day-report at one time do not appear on the report again, hence made a follow up appointment and was seen; 2) of those that still appear on the 104-day-report, how many have future appointments or no appointments.

Lessons learned: The search yielded 3,354 out of 8418 unduplicated patients on the 104-day-reports during this time frame. 208 (62%) of the patients were not on the 104-day-report anymore hence have followed-up with their provider: 170 (5%) were inactive and 17 (1%) were deceased. 1087 (32%) were still on the 104-day-report but 331 (30%) of them had an appointment scheduled for the future.

Next steps: Given these findings, having a patient’s medical provider involves in this process of calling patients in the case of a missed appointment is highly effective and yields higher retention into the care.

Presenting author email: ssayana@gmail.com

WEPE0966
Using an interdisciplinary strengths based practice model to address ethics, human rights, and HIV/AIDS
E. Tomaszewski1, L. Cox2, S. Hayes3, N. Link3
1National Association of Social Workers, Human Rights and International Affairs, Washington, DC, United States; 2The Richard Stockton College of New Jersey, Galloway, NJ, United States; 3American Bar Association, Clinical Managament Committee, Washington, DC, United States; 4H & Consulting, Washington, DC, United States

Issues: The right to health is increasingly understood to more broadly include the diverse rights that relate to access to prevention, care, treatment, and support for persons living with and/or affected by HIV/AIDS. Yet scarce resources, confidentiality protections, reporting and HIV testing requirements; coupled with the stigma and discrimination toward marginalized and at-risk groups (e.g., sex workers, persons with substance abuse, racial and ethnic minorities) challenges providers confronted with difficult decisions that raise ethical questions or dilemmas at both the individual and systemic levels of practice.

Description: A decision making model appropriate for use by providers across disciplines (law, medical, social services) will help providers identify and address ethical dilemmas. Using lecture, case vignettes, and experiential exercises, participants will learn about right based principles; the use of a decision making model to help clarify and process ethical dilemmas; and the role of inter-disciplinary consultation; and opportunities for promoting human rights.

Lessons: Program evaluation evidence reveals that “participants increased their understanding that ethical concerns emerge naturally in working with persons affected by HIV/AIDS”; “gained an solid understanding of the use of the decision making model to help clarify and process ethical dilemmas”; and “increased understanding of barriers to care, the role of the provider in curbing ethical questions or dilemmas”.

Next steps: Integrating a practice model for ethical decision making can help providers to provide better services to clients that take into consideration the complex practice, personal, and systemic issues of HIV/AIDS services. The model ensures that providers have an awareness of professional codes of ethics; legal and policy implications on practice; and HIV/AIDS as a human rights issues. It provides a tool that can be applied both to their professional work as well as sharing the information with clients.

Presenting author email: lisa.cross@stockton.edu

WEPE0967
Limiting stigma and discrimination among health care providers in Mena - PLHIV partner with supportive local psycians
E. Cleghorn, A. Kay, S. Datta
1World Health Organization, Geneva, Switzerland; 2Health Policy Initiative, Task Order One, Washington, United States; 3Centre for Development and Population Health Activities, USAID | Health Policy Initiative, Task Order One, Washington, United States

Issues: Only 14 percent of those people who need treatment are receiving antiretroviral drugs in the MENA region. When provided at all, ART regimens are limited, as are condoms-consistently therapies and conspiracy. Health care providers are uncommon. Necessary testing, including CD4 and viral load, that is crucial to effective treatment often is not available. Added to this are high levels of stigma and discrimination that lead to access to care for PLHIV. PLHIV are reported being rejected by hospitals, clinics and for pre-natal, delivery and post-natal care.

Description: The Investing in MENA HPI Stigma Reduction Workshop raised awareness about stigma and discrimination within the health care sector; provided an opportunity for PLHIV leaders and health care providers nominated by PLHIV to learn and work together as partners in the HIV response to reduce stigma and discrimination; and provided an opportunity for health care providers and PLHIV from the MENA region to learn about the latest clinical advances in HIV related treatment, ART, PMTCT, care and support other and current specific information. The Stigma Reduction Workshop was followed-up with a basic advocacy training where participants defined advocacy and the advocacy process and were provided an opportunity to work on an advocacy issue of their choice.

Lessons learned: PLHIV themselves nominated supportive physicians to attend the workshop which was a new methodology used for participant selection. This made a difference regarding planning advocacy efforts in-country related to S&D and the dire treatment coverage in the region. All advocacy plans focused on access to treatment.

Next steps: A regional treatment advocacy workshop is planned for April 2010 where the HPI TO1 model for successful treatment advocacy in Jordan will be explored for roll-out in other countries in the region. This will include enrollment of key partners to provide treatment access support and PLHIV leadership with supportive health care providers.

Presenting author email: rolephrm@futuresgroup.com

Role of international organizations and institutions WEPE0968-WEPE0972
WEPE0968
Epidemiology of TB/HIV co-infection in the SAARC region and regional efforts to contain it
K.K. Jha, V.S. Salhotra, A.P. Weerakoon
SAARC Tuberculosis & HIV/AIDS Centre, Kathmandu, Nepal

Background: Addressing HIV associated Tuberculosis is an important component of the new “Stop TB Strategy” which builds on the DOTS strategy. SAARC is an association of eight countries, i.e. Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Some SAARC countries have initiated some TB/HIV collaborative activities. However, TB/HIV collaboration is yet to take off effectively in SAARC member countries. The study was carried out to review the TB/HIV situation in the SAARC region and analysis of containment efforts.

Methods: A Record Based Descriptive Study. The data were collected from the Annual Reports STAC and Annual Reports of Member states of the SAARC which are published from 2003 to 2009.

Results: The estimated prevalence of HIV among TB patients in 2007 in Afghanistan, Pakistan, and Sri Lanka was < 0.05%, 0.8%, 2.1% and 0.1% respectively. According to studies carried out HIV prevalence in TB patients in Bangladesh was consistently low, zero in Bhutan, between 1% and 13.8% in India and 2.4% in Nepal. Major activities carried out by the STAC to control TB/HIV co-infection in SAARC member countries were human resource development, advocacy programs, strengthening networked working, research activities, and developed regional strategies for HIV/AIDS and TB/HIV co-infection.

Conclusions: To contain the TB/HIV epidemic, the SAARC region is determined to fight against it with effective planning and implementation of comprehensive packages of service. Revised SAARC Region Strategy on TB/HIV co-infection and its implementation plan has been developed and all member countries are progressing well in implementation of the same.

Presenting author email: drkjkha@hotmail.com

WEPE0969
Transitioning leadership of a large HIV treatment programme from an international organisation to local partners: the experience of AIDSRelief in South Africa
R.D. Stahl1, A. Munro2, C. Serenata3, R. Wood2
1Catholic Relief Services, South Africa, Johannesburg, South Africa; 2Southern African Catholic Bishops Conference, AIDS Office, Pretoria, South Africa; 3South African National AIDS Council Secretariat, Pretoria, South Africa; 4University of Cape Town, Desmond Tutu HIV Centre, Cape Town, South Africa

Issues: AIDSRelief/South Africa was one of nine country programs in a consortium led by Catholic Relief Services, awarded a five-year HIV care and treatment grant in 2004 by the US President’s Emergency Plan for AIDS Relief (PEPFAR). AIDSRelief/South Africa implemented the grant through two umbrella local partners: the AIDS Office of the Southern Africa Catholic Bishops’ Conference and the Institute of Youth Development/South Africa. The vision was to transition leadership to the local partners at the end of the grant.

Description: Preparation for transition began Day 1. Local partners participated with international staff in financial compliance training, planning clinical care and treatment, and establishing systems monitoring and evaluation systems. Joint decision-making and collaborative implementation characterized relationships. Local clinical and administrative teams were assigned and linkages established with local education institutions. Over 5 years, 73,293 people in resource-limited...
Lessons learned:

Transition of leadership to the local partner begins with recognition of local capacity and commitment to build upon local strengths. It is essential to establish linkages with local experts, educational institutions, and government entities that will support the local partner when external technical support is unavailable. International and local staff should work as a team, to reinforce local ownership and enhance local capacity.

Next steps:

The Special Rapporteur will continue providing technical support in certain key areas. A priority will be to more fully link the services offered by the church facilities with the government health systems, to ensure continued technical and financial support both globally, and in relation to practices of individual States.

Next steps:

The Special Rapporteur, being in a unique position to independently highlight HIV/AIDS-related human rights concerns, shall engage with civil society and representatives from the HIV/AIDS community to increase awareness of the mandate and promote its use in the HIV/AIDS response. This shall occur through various methods, including country-specific communications, missions, and consultations involving meetings, workshops, and information sessions.

Presenting author email: flonabender@gmail.com

WEPE0972

Examining the interconnectedness of global policies, actors, and market dynamics for first-line, adult antiretroviral medicines: implications for scale-up of HIV/AIDS treatment

H. Wang1, M.Kyle2, E. Dedrickhein3, L. Soucy1, J. Hochstadtk, T. Baarqueshen4, A. Moore5

1Boston University School of Medicine, Boston, United States, 2Toulouse School of Economics, Toulouse, France, 3Aids Healthcare Foundation, United States, 4Boston University School of Public Health, Boston, United States, 5Harvard Kennedy School of Government, Cambridge, United States

Background:

Numerous international organizations are working towards universal access to antiretroviral treatment (ART) in low- and middle-income countries. Their funding and procurement policies, antiretroviral (ARV) certification programs, and HIV/AIDS standard treatment guidelines (STGs) contribute to the ARV market dynamics. Long term access to affordable, acceptable ARVs will require a better understanding of the interconnectedness of market dynamics and the actions of global players.

Methods:

We analyze 14,828 donor-funded, adult first-line ARV transactions (2002-2008) to describe relationships between market trends and: 1. World Health Organization (WHO) HIV/AIDS treatment guidelines; 2. PRequalification Programme (WHO Prequal) and United States (US) Food and Drug Administration (FDA) approvals, and 3. Global Fund (GF), President’s Emergency Plan for AIDS Relief (PEPFAR) and UNITAID.

Results:

- Older US guidelines recommended 4-first line regimes while over 2006 guidelines recommended 3.
- Newer WHO guidelines recommended 3-1 fixed dose combination (FDC) products were quality-approved for older regimes but only one-four for newer regimes. One year of US approval had a negative impact.
- Two large-scale purchasers, PEPFAR and UNITAID, accounted for 44%, 81%, and 76% of market volume for abacavir, emtricitabine, and tenofovir, respectively, in 2008, following inclusion in 2006 WHO STG.
- Product quality standards for company-specific FDCs were available to US purchasers in 2004 and for PEPFAR recipients after PEPFAR approval in 2006.
- Purchases volumes for emtricitabine and tenofovir increased >15-fold from 2006 to 2008, following inclusion in 2006 WHO STG.
- More expensive zidovudine ($187-225/person/year) or tenofovir-based ($220-439/person/year) regimes replaced stavudine-based regimes ($85/person/year) in 2006 WHO STG.
- Two large-scale purchasers, PEPFAR and UNITAID, accounted for 44%, 81%, and 76% of market volume for abacavir, emtricitabine, and tenofovir, respectively, in 2008, with purchases often split across two suppliers.

Conclusions:

Policy decisions of international organizations have direct implications on market dynamics. WHO treatment guidelines shape global demand; therefore, recommending fewer regimes may help achieve economies of scale in pharmaceutical manufacturing. Certification programs assure ARV quality but can delay uptake of new formulations. Global movement towards large-scale and pooled purchasing will depend on the strategic choice of better buyers and sellers with potential for less competition in the long term.

Presenting author email: blwynig@bu.edu

Roles and responsibilities of the state, civil society and private and business sectors

WEPE0973-WEPE0976

WEPE0973

Don’t forget the workers! The role of organized labor in addressing HIV in Mozambique

R. Xavier1, F. Manhica2, M. Monjane3, K. Foret3, O. Robles4, M. Hecol5

1Futures Group, Maputo, Mozambique, 2National Confederation of Free and Independent Labor Unions of Mozambique, Maputo, Mozambique, 3Future Group, Washington, United States

Issues:

Labor unions are the only organizations created expressly to protect workers’ welfare. While the business sector has received considerable donor attention, organized labor as advocates for HIV workplace interventions have been largely neglected. In Mozambique, nearly two-thirds of formal sector workers belong to a labor union, however prior to 2008, unions were not directly engaged in the national response to HIV.

Description:

The National Confederation of Free and Independent Labor Unions of Mozambique (CONSLIMO) represents 106,000 workers. Similar to other Mozambican labor unions, CONSLIMO had not adopted an HIV policy or addressed HIV in contract negotiations with employers. In 2008 CONSLIMO developed and implemented guidelines for worker representation and monitoring, adopted an HIV policy for its own employees and set a goal that 100% of new labor contracts would include HIV policies and/or programs. Subsequently, CONSLIMO developed and implemented guidelines for collective bargaining, Labor Conflicts and HIV and AIDS in collective bargaining negotiations and began collecting information on company-specific policies. To date, CONSLIMO has collected data on 136 companies and signed five new legally-binding labor contracts calling for HIV workplace policies and/or programs.

Lessons learned:

Labor unions are a sustainable advocacy and monitoring mechanism and should be an equal partner with business councils in defining multistakeholder responses to HIV. Unions can benefit from targeted assistance to incorporate HIV information, services and protections into contract negotiations.

Next steps:

CONSLIMO will press for HIV actions in all upcoming negotiations, participate in designing and monitoring labor contracts, and programs in companies that have signed new contracts, continue to monitor workplace conditions and advocate for employer compliance to national labor laws. Another umbrella union, SINHOUAL, is adopting CONSLIMO’s guidelines for their collective bargaining. The methods successfully employed in Mozambique can and should be applied to workplace initiatives throughout the world.

Presenting author email: mmonjane@futuregroup.com

Abstract Book Volume 2 | www.aids2010.org
WEPE0974
Safe Environment (SE). European policy models to build up a SE in sex venues as a method of basic prevention to help to minimize the spread of HIV infections
F.J. Erdély, H. Engel
AR AIDS; Koeln, Germany

Methods: Using a checklist, research was done in 40 cities resp. 249 venues in 19 countries in 2008/09. 
Results: 5 out of 19 countries: Denmark, France, Ireland, Switzerland and the UK have developed approaches to implement a SE. Looking on those approaches in means of how SE is organized and financed two models can be distinguished: In Model 1 the distribution of prevention material by the owners is voluntary. In Model 2 the owners are directly responsible for the financing and distribution of materials to clients. Public pressure in the background, which is based more or less distinct legal bases led to building up a SE. A prevention charter exists. Owners' organization are in charge to make their members fulfil the SE standards.
Conclusions: Implementation of the SE standards in all commercial sex venues is necessary and possible. SE only works if compliance with standards of prevention is mandatory. To ensure full compliance with the SE-standards of prevention SE requires a periodic review.

WEPE0975
Hairdressers against AIDS: A dynamic public/private partnership between L’Oréal and UNESCO
H. Kunetz1, C. Castle2, S. Michard1
L’Oréal, Professional Products Division, Paris, France, UNESCO, Paris, France

Hairdressers Against AIDS is an ambitious prevention education program that mobilizes L’Oréal’s worldwide network of trainers, and draws on HIV prevention expertise from UNESCO. The initiative trains professional hairdressers on HIV prevention, who in turn are encouraged to discuss HIV prevention with clients. Through clear and innovative training sessions, the goal is to provide hairdressing professionals with the resources, education and confidence they can inform others of the risks related to the HIV and AIDS, and to contribute to HIV prevention efforts.

The company employs 3000 trainers in 190 training centres, reaching 400 000 people on an annual basis. Since the initiative was launched in 2005, more than 1.2 million professionals benefited from the training. Each year, it is estimated that trained hairdressers convey HIV prevention knowledge to their clients with openness and understanding. Survey data that will be shared as part of this presentation indicates that hairdressers are proud to be engaged in HIV prevention efforts, and the project is now active in 26 countries.

In Russia, for example, 4’700 hairdressers participated to over 340 seminars in 2009, and on World AIDS day, L’Oréal mobilized over 420 hairdressing salons in more than 40 cities throughout the country to share their knowledge, dressing awareness and HIV prevention leaflets.

To encourage exchange of experiences and best practices, an active community has been established on a new Hairdressers Against AIDS website. In light of the success of the project, L’Oréal and UNESCO plan to improve the training tools and target training for younger hairdressers and apprentices. Presenting author email: akaisit@netcologne.de

WEPE0976
The responsibility of private employers towards their workers living with HIV: what does the law say exactly?
M. Ramaroson
University of Pretoria, Faculty of Law, Pretoria, South Africa

Background: The private sector, more particularly the workplace, has been identified as one of the key partners of the state in curbing the HIV and AIDS epidemic and for alleviating its impact. Yet, private corporations adopt workplace HIV programmes only on a voluntary basis. The result is that it is mostly large, sometimes medium, corporations that have undertaken steps for addressing HIV and AIDS in their workplaces. In addition to that, the content of workplace programmes varies from one workplace to the other. Yet, there is need for coordinating the response of the private business sector and for having core legal obligations for employers towards their HIV-positive workers. The purpose of this paper aims to review the legal obligations of private employers towards their workers living with HIV and what does the law say exactly in that regard.

Methods: For the purpose of my PhD with the Faculty of Law of the University of Pretoria, I have conducted a clinical assessment of the obligations of private employers as provided for in the labour and human rights laws of respectively Botswana, Madagascar and South Africa, three Southern African countries, which differ from each other in extent of involvement of the personal places in the fight against the HIV epidemic, their legal systems, and the manner the law has defined the obligations of employers.

Results: Although the guidelines contained in the ILO Code of Practice on HIV and AIDS in the World of Work are indicative and non-legally binding, they are based on established legal principles.

Conclusions: There is a need for specifying and clarifying the legal obligations of private employers towards their workers living with HIV. An effective partnership between the state, the private and the business sectors relies on a clear definition of the roles and responsibilities of each of these actors. Presenting author email: mianoko_ramaroson@hotmail.com

International trade law and intellectual property
WEPE0978
The role of the India civil society and generic industry in assuring access to ART for the global South
B. Ramme-Fülle1, A. Berner-Rodoreda2
1Action Against AIDS Germany, Lobby-and Advocacy, Tübingen, Germany, 2Action Against AIDS Germany, Brussels

The session will include views from civil society in Germany, India and generic companies in India.

Issues: India, which plays a crucial role in manufacturing and exporting affordable generics, had to implement all TRIPS-requirements (including product patent protection) into their national law in 2005, reducing India’s capacity to produce and export generic versions of patented ARVs.

Description: Action against AIDS in Germany is a network of more than 100 NGOs and faith based organisations and over 200 grassroot-groups advocating for universal access. In 2009 it was heading a 10 day long learning visit including delegates from civil society from Germany (Action against AIDS, BIUKO Pharma-Kampagne, action meteoor, MSF, medico international), India (Locost), South-Africa (TAC), Kenya (IPR) and UK (Stop-AIDS-campaign) to Indian generic industry (Cipla, Hetero, Aurobindo) and civil society groups (Lawyers collective, Alternative Law forum, Milano) to improve advocacy-work for access to ART for the global south.

Lessons learned: Not including the new WHO-treatment recommendations only 42% of the 9.5 million in need can access life-prolonging ART. Civil Society plays an important role in advocating for access to generic production of ARVs. Public pressure and dialogue with the pharmaceutical industry and governments can contribute to improved access. The session will:
• present the learning experiences from the visit from the perspective of a global civil society;
• reflect how patent applications in India jeopardise a free generic ART-market and present the campaign of Action against AIDS Germany against Indian patent applications.

Next steps: A tranfer the learning experience to other contexts of the global south.

Presenting author email: rammefulle@aids-kampagne.de

WEPE0979
“Counterfeit” moves to counter access
J. George1, P. Sivasubramanian1
1Lawyers Collective HIV/AIDS Unit, Mumbai, India, 2Lawyers Collective HIV/ AIDS Unit, New Delhi, India

Issues: Consolidated efforts at several fora by developed countries and multinational pharmaceutical companies to restrict access to generic versions of drugs under the guise of prohibiting “counterfeit” drugs and enforcement of intellectual property rights (IPRs) pose an emergent threat to access to medicines.

Description: While there is an acknowledged problem of fake, “spurious” drugs, there is a disturbing move at several international fora to define this problem as one of “counterfeit drugs”. This new definition conflates the public health issue of “spurious” drugs with possible violations of private IPRs. For instance, in India, Baya has argued in a case before the Delhi High Court that generic versions of patented drugs are “spurious drugs”. Increased implementation of cross-border measures by the European Union has led to seizures of “spurious”-anti-HIV medicines in transit from India to Brazil as “counterfeit goods”. An international Anti-Counterfeiting Trade Agreement, which seeks to establish TRIPS-plus IPR enforcement standards globally, is being drafted in secret. All these will impose a burden on the State to protect and enforce private IPRs. Developing and least developing countries are also being pressured to introduce TRIPS-plus IPR enforcement standards. The purpose of this presentation is to ensure that efforts to confine IPR and public health issues are rejected.Individually, developing countries should refuse to introduce TRIPS-plus IPR enforcement provisions in domestic laws.
WEPE0980
Seizures of generic medicines in the European Union: obstacles to ARV access in the developing world

M.C. Pimentel1, R. Reis2, F. Viegas Neves da Silva3, V. Terto Jr1
Brazilian Interdisciplinary AIDS Association ABIA, General Coordination, Rio de Janeiro, Brazil, 1Brazilian Interdisciplinary AIDS Association ABIA, Working Group of Intellectual Property, Rio de Janeiro, Brazil

Issues: In the last two years, approximately 20 shipments of medicines, including ARVs, were seized by EU customs authorities. One example happened in November 2008 when a shipment of Abacavir purchased by UNITAID was seized in transit to Nigeria because it was considered counterfeit. This action is part of an offensive of the EU to increase enforcement of IP rights through the EC Regulation 1381/2003. Under this regulation the EU customs authorities can seize medicines that are suspected of infringing trademarks or patents. This regulation goes against the principles of TRIPS and the Doha Declaration that dictates that there should not be barriers to legitimate trade. Several NGOs are pressuring the EU to review this regulation, alleging that generic medicines and counterfeit medicines are not the same and that access to essential medicines should be a priority of the EU.

Description: The Brazilian Working Group of Intellectual Property (a network of NGOs) is preparing a case study to be presented on the Permanent Court of Peoples (TPP) to be held in Madrid in May 2010 that documents and analyzes the seizures. This initiative is part of a global reaction against violations to public health in developing countries.

Lessons learned: The EU regulation and the seizures of generic represent an obstacle to access to medicines, especially generic versions of ARVs. Therefore, civil society should advocate in several forums to denounce such abusive practices and legislations.

Next steps: Publicize the court ruling and utilize it politically in order to dis- seminate information and mobilize other activists and NGOs. The main objective is to put pressure in the EU so that these regulations are not adopted in other countries. As well as it could represent a strong blow against the EU customs regulation and its abuse in preventing free trade of generics to developing countries.

Presenting author email: cpimenta@abiads.org.br

WEPE0981
HIV, drug policy and human rights in Latin America

G. Touze1, P. Cymerman2, M. Vitarelli3
1Intercambios Asociacion Civil, Board of Direction, Buenos Aires, Argentina, 2Intercambios Asociacion Civil, Advocacy Department, Buenos Aires, Argentina

Issues: Drug users’ vulnerability in Latin America is related to frequent incarceration, violence, stigmatization, and poor association with social and health problems. Social, cultural, economic, and political factors affect drug users’ access to prevention, treatment, care, and other social services. The “war on drugs” influences regional drug policies and governments do not always employ scientific evidence and best practices. Therefore, drug policies may contribute to the spread of HIV and to the failure of HIV treatment.

Description: From Project aims to consolidate alternative drug policies focused on health and human rights in Latin America. Specific goals include thorough information dissemination, advocacy efforts towards changes in legislation, and the consolidation of a Latin American platform to co-ordinate governmental and non-governmental actions. Three main strategies are being developed since 2008: public education related to drug policy and human rights; establishment of advocacy groups focused on legislative reforms; and cooperation with governmental and non-governmental organizations and activists. To date, important steps have been made regarding drug policy and legislation in Argentina, Brazil, Ecuador, Mexico, and Uruguay.

Lessons learned: Reducing drug related harm means not only sound public health policies but needs a reform of drug policies as well, and the implementation of broad public policies aiming to ameliorate the untoward consequenc- es of drug poverty, discrimination and criminalization. Weak public healthcare systems must be strengthened in order to improve their capacity to respond to drug related health problems, and these efforts must be articulated with community-based organizations. Alliances with regional partners have improved our advocacy capacity.

Next steps: Efforts like the Latin American Conference on Drug Policy, being launched in Buenos Aires in 2009, have demonstrated to be a powerful tool to raise awareness and impact on public opinion, but they must be accompanied by advocacy and exchange opportunities.

Presenting author email: gratouze@intercambios.org.ar

WEPE0982
Access to pain treatment and palliative care as a human right

D. Lohman, L. Thomas, J. Amor
Human Rights Watch, Health and Human Rights Division, New York, United States

Issues: Millions of people living with HIV, including many receiving ART, suffer from moderate to severe pain and other debilitating symptoms. Pain undermines quality of life and, studies suggest, reduces treatment adherence. Opioid medications such as morphine are highly effective and relatively inexpensive but poorly available in most countries.

Description: We surveyed healthcare workers in 35 countries and conducted more than 100 semi-structured interviews with healthcare workers, patients, and government officials in India, Kenya, and Ukraine to document barriers to pain treatment and palliative care. We analyzed governments’ obligations to address these barriers under international human rights law and the extent to which these obligations are being met.

Lessons learned: Common barriers include: poor integration of palliative care into HIV programs, poor instruction for healthcare workers, complex and unnecessarily restrictive drug control regulations that complicate supply and prescription of controlled medications, and the elevated cost of medications in many countries. Under international human rights law, countries are obliged to take reasonable steps to overcome these barriers. Many have failed to do so, in violation of the right to health and, in some cases, the prohibition of cruel, inhuman and degrading treatment.

Next steps: Governments should integrate palliative care into HIV program- ming, review drug control regulations to ensure that they do not unneces- sarily impede access to pain medications, and ensure appropriate training for healthcare providers. International agencies responsible for drug policy should work with governments to ensure that drug control efforts do not unnecessarily impede access to pain medications. Donors should support countries to include palliative care as part of comprehensive HIV treatment. Patients’ groups should explore ways to enforce the right to pain treatment through legal proceedings.

Presenting author email:lohman@hrw.org

WEPE0983
HIV and drug use: implications and challenges of ending the war on drugs and replacing it with a just and effective system of legal regulation

S. Roles
Transform Drug Policy Foundation, Policy and Research, Bristol, United Kingdom

Issues: What might an evidence based drug policy, based on public health and harm reduction principles, look like if freed from the constraints of existing absolutist prohibitions on drug production, availability, and use specified by the UN drug conventions. In a post-drug war world how might legal regula- tion and control of drug markets function? What would the appropriate models be for different drugs? How could they be developed and implemented? And what are the implication form HIV transmission, service provision and policy?

Description: The menu of possible regulatory options for drug markets will be reviewed in summary, including potential legal controls over products, outlets, vendors, availability, premises and using environments, and purchasers; how to control availability in ways that deliver the best outcomes both for users and wider society.

It will be proposed that different drugs, depending on product risk assess- ments and local environments, could be made available either through medi- cation prescription models, a specialist pharmacist model, various forms of li- censed sales or licensed premises. It will be demonstrated that in the longer term responsibly regulated markets can progressively shepherdin- g patterns of use towards safer drugs, preparations, behaviours and environments, in direct contrast to the harm maximising impacts of illicit drug markets.

The focus will be on the implication of such reforms for HIV transmission amongst injecting drugs users.

Lessons learned: This presentation aims to broaden the drug harm reduc- tion debate by providing a foundation for discussing legal drug regulation as a practical option for the next generation of drug policy development specifically highlighting harms associated with policy/legal environments rather than merely drug use per se.

Next steps: pragmatic/strategic options for drug policy and law reform will be presented, for a variety of civil society and political fora, with related online and published resources.

Presenting author email: steve@tdfp.org.uk

WEPE0984
Flexibility of control under international drug law: fulfilling the requirement of balance

E. Anderson1,2, C. Davis1, D. Burrows3, S. Burris1,2
1Consortium for Drug Control and Access to Medicines, Philadelphia, United States, 2Temple University, Philadelphia, United States, 3The AIDS Projects Management Group, Sydney, Australia

Issues: Nearly all people with AIDS will suffer moderate to severe pain. Opi- oid medications are essential for treatment of such pain, and are highly effec- tive in drug treatment programs that may reduce HIV infection rates. Access to opioids for legitimate medical purposes remains strikingly inadequate in much of the world, resulting in preventable suffering on a vast scale. Although international law requires states to ensure adequate access to these essential medications for medical and scientific purposes, many countries have enacted
International human rights law and policy
WEPE0985-WEPE0987
WEPE0985
Exploring Child Right Act in the context of HIV transmission among selected children in Nigeria
F. Tingola
Kogi State University, Sociology, Ankpa, Nigeria

Background: The Child Right Act (CRA) passed into law by Nigeria Parliament stipulates that “No person shall have sexual intercourse with a child and that a person who contravenes the position is liable on conviction to imprisonment for a period not exceeding seven years or to a fine or both. Any child engaged in sexual activities, real life experiences indicate that worst socio-economic conditions occasioned by current Global Economic Crisis have heightened the prevalence of adult-sex with children and threatened the implementation of the Act. This study examines the CRA in the context of child-sexualities resulting from the poor socio-economic conditions prevailing on HIV/AIDS infection among children in Nigeria.

Method: The study drew data primary and secondary sources, was conducted analyzing Child Right Act in Kogi, Kogi and Benue States. The study adopts the political delimitation of States into Senatorial Districts (SD). 1350 children (8-14 years) selected on Purposive Random Sampling from 9 SDs responded to a semi-structured Interview-Schedule containing questions for socio-economic characteristics, knowledge of CRA, sexual history and HIV Infection. Secondary data drew from intensive review of CRA in the context of Child Sexuality and HIV/AIDS sentinel-survey report, 2008. Primary data were analyzed on uni-variate and bi-variate statistics using Predictive Analytics Software while content analytical method was used to analysed secondary data.

Results: The knowledge of CRA in context of child-sexuality is poor, increased sexual deviance behavior, about 91% of child sexual abuse was not reported for prosecution and the proportion of sex-related HIV infection among children increased in the current national-statistics of HIV/AIDS.

Conclusion: Socio-economic empowerment, awareness campaign on CRA and consequent prosecution of sexual deviance offenders will reduce the trend of HIV infection among children.

Presenting author email: adude2000@yahoo.com

WEPE0986
A new human rights instrument on HIV/AIDS
A. Torriente1, S. Kisting2
1International Labour Organization, ILO/AIDS, Geneva, Switzerland, 2International Labour Organization, Geneva, Switzerland

Issues: Development and adoption of the first new international instrument on HIV/AIDS.

Description: The International Labour Organization has developed the first international instrument focused exclusively on HIV and AIDS, to be adopted in June 2010. The new instrument emphasizes prevention, taking a rights-based approach to the pandemic. It envisages development and adoption of national HIV workplace policies and contains provisions specific to key groups, including women, migrant workers, youth and children.

Lessons learned: The new instrument incorporates and builds on the ten key principles established in 2001 by the ILO Code of practice on HIV/AIDS and the world of work. The Code is a non-binding set of principles and guidelines. As the product of tripartite consensus between governments, employers and workers, it has been widely accepted and used successfully as the basis for HIV prevention and advocacy activities worldwide. Its principles, which call for, inter alia, elimination of stigma and discrimination on the basis of real or perceived HIV status, have been wholly or partly incorporated into legislation and policy by numerous countries. The new instrument builds on a decade of work to implement the Code, extending its scope and impact in many significant respects.

Next steps: The new instrument being incorporated into law and policy implementation. Measurable indicators are set out in the Code to assess progress in implementation. The Code also covers the means of implementation, capacity building and cooperation and supports activity and exchange of best practices.

Presenting author email: torriente@ilo.org

WEPE0987
Women’s rights are human rights - violence, HIV/AIDS and the link
A. Hylé1, P. Lupó2
1The University of Texas M. D. Anderson Cancer Center, Legal Services, Houston, United States, 2The University of Texas School of Public Health, Division of Epidemiology & Disease Control, Houston, United States

Issues: It is a well-known but poorly understood fact that violence against women has lasting, negative health impacts, including an association with a higher incidence of HIV/AIDS. In order to better understand the complex relationship between violence, HIV/AIDS and the law, we examined the impact of various legal and policy approaches (both as they relate to violence against women and to HIV/AIDS prevalence).

Description: Legal, anthropological and health data (including UN & WHO data) regarding sexual violence against women and girls and their link to violence against women and HIV/AIDS were analyzed on uni-variate and bi-variate statistics using Predictive Analytics Software while content analytical method was used to examine data on HIV/AIDS in various countries. This data was then cross-referenced with data regarding laws in those same countries regarding violence against women.

Lessons learned: We found significant variability between countries and regions, regarding both legal and extra-legal approaches to violence against women. Our findings suggest adverse health effects are lessened in areas with substantive interventions (both legal and extra-legal) and the absence of violence against women may show no positive influence on women’s health if the law isn't enforced or if adequate supportive infrastructure is lacking (e.g., women's shelters, access to health care, education). Furthermore, non-legalistic interventions which may not have either statutory or regulatory af- firmation nor advocate any change to existing law, can, in fact, have significant impact in reducing violence against women.

Conclusion: More research needs to be conducted regarding the lasting health effects of violence against women. In the interim, however, energies are probably better spent focusing on results rather than process.

Presenting author email: hyle@mdanderson.org

WEPE0988
A rights-based model to improve HIV pharmaceutical security and safety
M. Wang
US P, USP, Uruguay

Background: The major barriers in HIV-related pharmaceutical rights are security and safety. Pharmaceutical safety is the right of protection from unsafe pharmaceuticals. The purpose of this study: examine the application of these rights in HIV-related pharmaceutical-practice in the global trade context and propose a rights-based model.

Method: A meta-analysis of global agreements in: 1. trade, 2. intellectual property rights (TRIPS), 3. surveillance/quality control in supply and demand chain; 4. development aid and capacity building for pharmaceutical access. The sample: WTO agreements (TRIP, DONA, WIPO, TRUP–free trade agreements [NAFTA, FTAs, EPA, EFTA, etc.]); unilateral trade policies; bilateral investment treaties, IPR agreements, science and technology and agreements; development cooperation and partnership agreements; WTO accession agreements, US Foreign Assistance Act, EU development aid policies, US HRSA, Bermond Rule, ACTA, IMPACT, SECURE, The Security and Prosperity Partnership of North America), APEC’s ACPI, MDGs, etc.

Results: A meta-analysis of pharmaceutical access to HIV medicine in the global trade context shows that barriers exist in pharmaceutical security and safety rights. The barriers to pharmaceutical security: TRIP plus agreements contradict DONA (e.g., it is not non-discriminatory); technical barriers to generic production (data exclusivity); illicit IPR regimes; global supply and demand/income imbalances (e.g., non-communicable diseases); inflexible pricing schemes; and development aid deficiency. The barriers to pharmaceutical safety: confirming safety with quality measures [ACTA vs. WTO’s Article 61]; lack of supply and demand and supply chain safety; and integrated surveillance and monitoring.

Conclusion: Major barriers exist in protecting HIV pharmaceutical security and safety. A rights-based model needs to apply the principles of inclusion, access, equality, cooperation (reduction in global trade, IPR, generics, pharmaceutical investment and pricing, global aid and development, and supply and demand chain safety and balance.)
WEPE0989
Challenging pharmaceutical patent strategies to improve access to ARVs in Brazil: the case of tenofovir

F. Viegas Neves da Silva 1, R. Reis 1, M. Fogaça Vieira 1, V. Terto Jr 2, M.C. Pimenta 3
1ABIA - Brazilian Interdisciplinary AIDS Association, Working Group of Intellectual Property, Rio de Janeiro, Brazil, 2Brazilian Interdisciplinary AIDS Association ABIA, Working Group of Intellectual Property, Rio de Janeiro, Brazil, 3Connectas Human Rights, Justice Program, São Paulo, Brazil

Issues: Tenofovir is an ARV used in Brazil to treat approximately 20,000 patients. Tenofovir original patent application is for its salt (tenofovir disoproxil fumarate - TDF). It was filed by Gilead Sciences in 1998 (M9811045-4 - US5,935,946) and was denied by the Brazilian Patent Office (INPI) in June 2009 because it lacked inventiveness. Although the original patent application was dismissed, Gilead filed a divisional patent application for TDF (P09816239-0) in July of 2008 - that still has not been examined - aiming to prolong lifespan of patent protection for their product (Viread®). Both these practices are considered anticompetitive because they intend to extend undue monopolies from pharmaceutical companies by delaying the generic entry. This kind of practice was denounced in the Final Report of the European Commission on its competition inquiry into the pharmaceutical sector (2009).

Description: The Brazilian Working Group of Intellectual Property (a network of NGOs) presented a pre-grant opposition petition in December 2006 to the original TDF patent application based on lack of inventiveness. In November 2009, a second pre-grant opposition was presented against the divisional patent application of TDF because it did not fulfill the Brazilian IP Law divisional requirements and because Gilead presented new claims that weren’t present in the original patent application.

Lessons learned: It is important to advocate avoiding adoption of different anticompetitive strategies that cause delay in the access to generic versions of medicines. A multisectoral social watch is important to monitor the patent granting process, in order to prevent abuses.

Next steps: The Brazilian civil society will continue to monitor the anticompetitive practices of pharmaceutical companies that impact the access to medicines. More pressure will be put on Brazilian Antitrust Authority (SDE) to control practices such as this, as well as social mobilization and public debate around this issue will be reinforced.

Presenting author email: francisco@abiaids.org.br

WEPE0990
Public price trends for innovator and generic AIDS medicines in Latin America and the Caribbean 2005-2008

C. Trouil, Y. Santa Ana Tellez 1, V.J. Wirtz 1, W.A. Kaplan 1
1Boston University School of Public Health, Cambridge, Mass, United States, 2Instituto Nacional de Salud Pública, Cuernavaca, Mexico, 3Boston University School of Public Health, Cambridge, United States

Background: 2.0 million people in the Latin America and Caribbean region (LAC) are infected with HIV. Though the majority of LAC countries are middle-income, sustainable access to antiretroviral drugs (ARVs) is hampered by high drug prices, particularly those of second-line treatment, and the recent economic downturn.

Methods: Using the Global Price Reporting Mechanism (GPRM) data base provided by the World Health Organization (WHO), we compared median prices and price trends for public entities in 16 LAC countries for 24 individual ARVs from January 1, 2005 to December 31, 2008. We also compared the median price trends for innovator and generic versions over the time period.

Results: Taking 2005 as the baseline, median prices for all 12 first-line ARVs both innovator and generic, declined from 18%-96%, depending on the drug and formulation. For second-line drugs, the median prices for 8 of the 12 innovator drugs analyzed actually increased from 10-149% (per individual drug) while the prices of the remaining four declined from 9-76%. For generic second-line drugs, the median prices for 3 out of 7 generic drugs increased 9-85% while the other four declined 9-53%.

Conclusions: Other studies focusing on other regions of the world have found that first-line ARV prices are declining rapidly while second-line ARV prices are declining more slowly or not at all. Our analysis -the first to our knowledge of LA region- found the same trend in the LAC region for first-line drugs but rising prices for many 2nd-line ARVs.

Presenting author email: ctroti@bu.edu
Buchanan D. 1:WEPE0739
Buchlind S. 2:FRJBC102,
Buchholz 2:THPE0012
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Buchholz F. 1:MOAO103,
Kaufman J.S.   2:THLBA106
Katzmann J.A.   1:TUPE0161
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Katongole J.   1:TUPE0613
Kato S.K.   2:WEPE0375
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,
Kassu P.   2:THPE0991
Kassouf V.T.   1:MOPE0024
Kassaye S.   2:THPE0356
Kassambala B.   2:WEPE0793
Kasraian L.   1:TUPE0425
Kasirye A.   1:MOPE0700
Kasinskaite-Buddeberg I.
Kashongwe Z.   2:WEPE0029
Kasettratat N.   2:WEPE0141
Kasera J.   1:MOPE0967
Kaseke S.   1:MOPE0592,
Kaseke K.   1:TUPDC203
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Kartashova L.   2:WEPE0750
Karpiak S.   2:WEPE0734
Karpenko L.   1:MOPE0042,
Karnite A.   2:WEPE0559
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,
Kassu P.   2:THPE0991
Kassouf V.T.   1:MOPE0024
Kassaye S.   2:THPE0356
Kassambala B.   2:WEPE0793
Kasraian L.   1:TUPE0425
Kasirye A.   1:MOPE0700
Kasinskaite-Buddeberg I.
Kashongwe Z.   2:WEPE0029
Kasettratat N.   2:WEPE0141
Kasera J.   1:MOPE0967
Kaseke S.   1:MOPE0592,
Kaseke K.   1:TUPDC203
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Kartashova L.   2:WEPE0750
Karpiak S.   2:WEPE0734
Karpenko L.   1:MOPE0042,
Karnite A.   2:WEPE0559
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,
Kassu P.   2:THPE0991
Kassouf V.T.   1:MOPE0024
Kassaye S.   2:THPE0356
Kassambala B.   2:WEPE0793
Kasraian L.   1:TUPE0425
Kasirye A.   1:MOPE0700
Kasinskaite-Buddeberg I.
Kashongwe Z.   2:WEPE0029
Kasettratat N.   2:WEPE0141
Kasera J.   1:MOPE0967
Kaseke S.   1:MOPE0592,
Kaseke K.   1:TUPDC203
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Kartashova L.   2:WEPE0750
Karpiak S.   2:WEPE0734
Karpenko L.   1:MOPE0042,
Karnite A.   2:WEPE0559
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,
Kassu P.   2:THPE0991
Kassouf V.T.   1:MOPE0024
Kassaye S.   2:THPE0356
Kassambala B.   2:WEPE0793
Kasraian L.   1:TUPE0425
Kasirye A.   1:MOPE0700
Kasinskaite-Buddeberg I.
Kashongwe Z.   2:WEPE0029
Kasettratat N.   2:WEPE0141
Kasera J.   1:MOPE0967
Kaseke S.   1:MOPE0592,
Kaseke K.   1:TUPDC203
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Kartashova L.   2:WEPE0750
Karpiak S.   2:WEPE0734
Karpenko L.   1:MOPE0042,
Karnite A.   2:WEPE0559
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,
Kassu P.   2:THPE0991
Kassouf V.T.   1:MOPE0024
Kassaye S.   2:THPE0356
Kassambala B.   2:WEPE0793
Kasraian L.   1:TUPE0425
Kasirye A.   1:MOPE0700
Kasinskaite-Buddeberg I.
Kashongwe Z.   2:WEPE0029
Kasettratat N.   2:WEPE0141
Kasera J.   1:MOPE0967
Kaseke S.   1:MOPE0592,
Kaseke K.   1:TUPDC203
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Kartashova L.   2:WEPE0750
Karpiak S.   2:WEPE0734
Karpenko L.   1:MOPE0042,
Karnite A.   2:WEPE0559
Karwat M.   2:WEPE0044
Karusa K.   1:MOPE0869
Katz I.T.   2:WEPE0170
Katsarou O.   2:WEPE0153
Kathambana F.   1:MOPE0462
Katende J.C.   1:MOPE0972
Kasymova N.   1:TUPE0920
Kasujja A.   1:TUPE0963,