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Maarten Schim van der Loeff, Netherlands
Rebecca Schleifer, United States
Axel Schmidt, Germany
Claudia Schmidt, Austria
Gabriele Schmid, Austria
Robert Schooley, United States
Erik Schouten, Malawi
Hanneke Schuitemaker, Netherlands
Olivier Schwartz, France
M. Seckinoglu, United Kingdom
Deirdre Seery, Ireland
Shannon Seneffeld, United States
Geoffrey Settles, South Africa
Jae Sevelius, United States
Daniel Seyoum, United States
Starley Shade, United States
Nathan Shaffer, Switzerland
Kate Shannon, Canada
Yiming Shao, China
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Anjali Sharma, United Kingdom
Mukta Sharma, Thailand
Sherine Shawky, Egypt
Ren Slow, United States
Susan Sherman, United States
Lorraine Sherr, United Kingdom
Nobuki Shimizu, Japan
Tatsuo Shida, Japan
Iris Shiripinda, Netherlands
Ram Shrestha, United States
Sadeep Shrestha, United States
Sengizewi Silbiko, South Africa
George Siberry, United States
Scott Sieg, United States
Juan Sierra Madero, Mexico
Jason Sigurdsson, Switzerland
Alfonso Silva Santisteban, Peru
Michael Silverberg, United States
Leekins Simbayi, South Africa
Padam Simkhada, United Kingdom
François Simon, France
Professor E. Simon, India
Sagar Singh, United States
Salvinder Singh, Nigeria
Tin Tin, Switzerland
Serra Sippell, United States
Sunee Sirivichayakul, Thailand
JA Skyler, United States
Anthony Smith, Australia
Davey Smith, United States
Dawn Smith, United States
Kimberly Smith, United States
Stephen Smith, United States
Marcelo Soares, Brazil
Ricardo Sohieh Diaz, Brazil
Annette Sohn, South Korea
Sunil Solomon, India
Gerlinda Somervelle, United States
Ruiguang Song, United States
Ulrike Sonnenberg-Schwan, Germany
Ramon J. Soto, Honduras
Luis Soto-Ramirez, Mexico
Cathia Soulid, France
Papa Salif Sow, Senegal
Gregory Speir, United States
Stephen Spector, United States
Paul Spiegel, Switzerland
Pilgrim Spikes, United States
Bruno Spire, France
Devi Sridhar, United Kingdom
Paddmi Srikantia, India
Ron Stall, United States
Leonidas Stamatooudis, United States
Janusz Stanczak, Poland
Elfred Steffen, Germany
Christine Stegling, United Kingdom
Nikki Stein, Canada
Alice Stek, United States
Christoph Stephan, Germany
David Stephens, Australia
Liliana Stecovea, United States
Wendy Stevens, South Africa
Mario Stevenson, United States
Wayne Stewart, United States
Heribert Stolper, Austria
Matthias Stoll, Germany
Ineke Stolte, Netherlands
Valerie Stone, United States
John Stover, United States
Par Strand, South Africa
Steffanie Strathdee, United States
Elizabeth Stringer, Zambia
Vernon Stringer, Canada
Ann Strode, South Africa
Kimberly Stritzel, United States
Oksana Strujska, Lithuania
Helin Struthers, South Africa
Raminta Stuikyte, Lithuania
SE Stutterheim, Netherlands
T. Subramanian, India
Maria Cecilia Sucupira, Brazil
Omar Sued, United States
John Sullivan, Australia
### TABLE OF CONTENTS

**Monday 19 July**

#### Oral Abstract Sessions

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOAA01</td>
<td>Novel Therapeutic Strategies</td>
<td>17</td>
</tr>
<tr>
<td>MOAB02</td>
<td>Treatment of Children: HIV in Children, Prognosis and Outcomes of Treatment</td>
<td>18</td>
</tr>
<tr>
<td>MOAB03</td>
<td>HIV and TB: Clinical and Programmatic Approach</td>
<td>21</td>
</tr>
<tr>
<td>MOAB04</td>
<td>Pediatric HIV and ART Complications</td>
<td>22</td>
</tr>
<tr>
<td>MOAC01</td>
<td>Advancing Prevention for People Living with HIV</td>
<td>23</td>
</tr>
<tr>
<td>MOAC02</td>
<td>HIV in Eastern Europe: Epidemics, Prevention and Treatment</td>
<td>24</td>
</tr>
<tr>
<td>MOAC03</td>
<td>Addressing Risk for HIV among Female Sex Workers</td>
<td>25</td>
</tr>
<tr>
<td>MOAC04</td>
<td>Drug Injecting: Responding to &quot;New&quot; and &quot;Old&quot; HIV Epidemics</td>
<td>27</td>
</tr>
<tr>
<td>MOAD01</td>
<td>Local Strategies for Prevention</td>
<td>28</td>
</tr>
<tr>
<td>MOAD02</td>
<td>Positive Health and Resilience for Individuals and Communities</td>
<td>29</td>
</tr>
<tr>
<td>MOAD03</td>
<td>Changing Social Norms</td>
<td>30</td>
</tr>
<tr>
<td>MOAE01</td>
<td>Impact of HIV Programs on Other Health Services and Population Health</td>
<td>31</td>
</tr>
<tr>
<td>MOAE02</td>
<td>Socioeconomic Impact of HIV on Households</td>
<td>32</td>
</tr>
<tr>
<td>MOAE03</td>
<td>Retention in Care for HIV Population</td>
<td>34</td>
</tr>
<tr>
<td>MOAE04</td>
<td>Cost-Effectiveness of ART Options</td>
<td>35</td>
</tr>
<tr>
<td>MOAF01</td>
<td>Using the Law for Change</td>
<td>36</td>
</tr>
<tr>
<td>MOAF02</td>
<td>Beyond the Individual: Structural Effects of Drug Law and Policy on Health</td>
<td>37</td>
</tr>
</tbody>
</table>

#### Oral Poster Discussions

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOPD01</td>
<td>Viral Dynamics and Fitness</td>
<td>39</td>
</tr>
<tr>
<td>MOPD02</td>
<td>Issues in HIV Therapy and Resistance</td>
<td>40</td>
</tr>
<tr>
<td>MOPD03</td>
<td>Why and How to Prevent HIV and HCV in Drug Users</td>
<td>41</td>
</tr>
<tr>
<td>MOPD04</td>
<td>Reframing Messages and Methods: Media and Communications around HIV</td>
<td>43</td>
</tr>
<tr>
<td>MOPD05</td>
<td>Using Data to Improve HIV Care Delivery</td>
<td>44</td>
</tr>
<tr>
<td>MOPD06</td>
<td>Innovative Models of HIV Care</td>
<td>45</td>
</tr>
<tr>
<td>MOPD07</td>
<td>Strategies to Support Health Workers to Deliver Care</td>
<td>47</td>
</tr>
<tr>
<td>MOPD08</td>
<td>Community Action Making a Difference</td>
<td>48</td>
</tr>
<tr>
<td>MOPD09</td>
<td>Access to Generics: TRIPS Flexibilities and Beyond</td>
<td>49</td>
</tr>
<tr>
<td>MOPD10</td>
<td>Sexuality Education and its Role in HIV Programmes</td>
<td>50</td>
</tr>
</tbody>
</table>

#### Poster Exhibition

##### Track A > Basic Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOPE001</td>
<td>Mother-to-Child Transmission</td>
<td>53</td>
</tr>
<tr>
<td>MOPE002</td>
<td>Acute and Early HIV Infection</td>
<td>54</td>
</tr>
<tr>
<td>MOPE007</td>
<td>Preclinical HIV Drug Development</td>
<td>55</td>
</tr>
<tr>
<td>MOPE008</td>
<td>Preclinical Development of Microbicides</td>
<td>60</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOPE003</td>
<td>Molecular Mechanisms of Resistance to Antiretroviral Therapy</td>
<td>60</td>
</tr>
<tr>
<td>MOPE004</td>
<td>Nucleic Acid Based HIV and SIV Therapies</td>
<td>61</td>
</tr>
<tr>
<td>MOPE005</td>
<td>Antibody Based Vaccines</td>
<td>62</td>
</tr>
<tr>
<td>MOPE006</td>
<td>Cellular Immunity Based Vaccines</td>
<td>63</td>
</tr>
<tr>
<td>MOPE007</td>
<td>Novel Vectors and Strategies</td>
<td>64</td>
</tr>
<tr>
<td>MOPE008</td>
<td>Viral Determinants of SIV Pathogenesis</td>
<td>66</td>
</tr>
<tr>
<td>MOPE009</td>
<td>Novel Animal Models for Vaccine and Inhibitor Development</td>
<td>67</td>
</tr>
<tr>
<td>MOPE010</td>
<td>HIV - Hepatitis Virus Interactions</td>
<td>67</td>
</tr>
<tr>
<td>MOPE011</td>
<td>Mycobacteria and TB</td>
<td>69</td>
</tr>
<tr>
<td>MOPE012</td>
<td>Interactions with Other Pathogens</td>
<td>70</td>
</tr>
<tr>
<td>MOPE013</td>
<td>Novel Assays of Immune Responses</td>
<td>72</td>
</tr>
</tbody>
</table>

##### Track B > Clinical Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOPE011</td>
<td>Impact of Nutrition</td>
<td>74</td>
</tr>
<tr>
<td>MOPE012</td>
<td>Opportunistic Infections (Excluding Mycobacterial)</td>
<td>78</td>
</tr>
<tr>
<td>MOPE013</td>
<td>Tuberculosis</td>
<td>80</td>
</tr>
<tr>
<td>MOPE014</td>
<td>Other Bacterial Infections and Malaria and Parasitic Infections</td>
<td>90</td>
</tr>
<tr>
<td>MOPE015</td>
<td>Sexually Transmitted Infections (STI)</td>
<td>94</td>
</tr>
<tr>
<td>MOPE016</td>
<td>Prophylaxis of HIV Associated Infections; e.g. Pneumococcal, Hepatitis and Hpv, Co-trimoxazole Prophylaxis and IPT</td>
<td>98</td>
</tr>
<tr>
<td>MOPE017</td>
<td>Immune Reconstitution Disorders / IRIS</td>
<td>100</td>
</tr>
<tr>
<td>MOPE018</td>
<td>Complementary and Traditional Medicines and the Role of Traditional Healers in Therapy</td>
<td>102</td>
</tr>
</tbody>
</table>

##### Track C > Epidemiology and Prevention Sciences

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOPE019</td>
<td>Prevention of Mother-to-child Transmission</td>
<td>103</td>
</tr>
<tr>
<td>MOPE020</td>
<td>Male and Female Condoms and Other Physical Barriers</td>
<td>119</td>
</tr>
<tr>
<td>MOPE021</td>
<td>Harm Reduction, Including Reduction of Unsafe Injecting and Other Approaches</td>
<td>123</td>
</tr>
<tr>
<td>MOPE022</td>
<td>Blood, Organ and Tissue Safety and Nosocomial Transmission</td>
<td>127</td>
</tr>
<tr>
<td>MOPE023</td>
<td>Male Circumcision</td>
<td>128</td>
</tr>
<tr>
<td>MOPE024</td>
<td>STI Prevention and Control</td>
<td>136</td>
</tr>
<tr>
<td>MOPE025</td>
<td>Pre-exposure and Post-exposure Prophylaxis</td>
<td>138</td>
</tr>
</tbody>
</table>
Microbicides
MOPE0383-MOPE0391
Preventive Vaccines
MOPE0392-MOPE0396
Antiretroviral Treatment of People Living with HIV for Prevention
MOPE0397-MOPE0401
Approaches to Counselling and Testing in Youth and Adults
MOPE0402-MOPE0422
Approaches to Counselling and Testing in Children and Caregivers
MOPE0423-MOPE0427
Approaches to Improving Adherence to Prevention Interventions
MOPE0428-MOPE0433
Combination of Prevention and Treatment of HIV
MOPE0434
HIV Counselling, Testing and Diagnostic Strategies
MOPE0435-MOPE0483

Track D > Social and Behavioural Sciences
Combination Prevention Programmes
MOPE0485-MOPE0500
Behavior Change Communication (BCC) or Communication for Behavioural and Social Change Aiming to Change Individual Knowledge, Attitudes, or Behaviour (e.g. Changed Knowledge, Risk Perception, Changed Behaviour, Health Care Seeking or Adherence, Sexual and Reproductive Health)
MOPE0501-MOPE0610
Communication for Behavioural and Social Change, or Social Change Communication to Affect Group or Societal Outcomes (e.g. to Change Social Norms, Community Stigma Reduction, Policy Change)
MOPE0611-MOPE0674
School-based Sexuality Education, Life Skills Education
MOPE0675-MOPE0696
Community Mobilization, Social Mobilization
MOPE0697-MOPE0731
Safe Virtual or Physical Spaces (e.g. Drop-in Centres, Telephone Hotlines etc.)
MOPE0732-MOPE0736
Housing and Physical Environment
MOPE0737-MOPE0741
Using New Information Technologies (Cell Phones, Internet, etc.) for Prevention, Treatment, Care and Support
MOPE0742-MOPE0776
Community Strengthening, Building Social Capital
MOPE0777-MOPE0812
Child Care, Infant Feeding
MOPE0813-MOPE0817
Other Behavioural and Structural Interventions
MOPE0818-MOPE0841

Track E > Economics, Operations Research, Care and Health Systems
Integrating HIV Services into Outpatient and Inpatient Services
MOPE0842-MOPE0845
Implementing Integrated HIV-TB, HIV-STI, of Other Services
MOPE0846-MOPE0859
Implementing PMTCT in the Context of Maternal and Child Health or Antenatal Care Programmes
MOPE0860-MOPE0870
Effect of HIV Funding/Programming on Other Services e.g. Maternal Health, Child Health, Chronic Non-communicable Conditions
MOPE0871-MOPE0874
Building or Adapting the Workforce Required to Support the HIV Epidemic
MOPE0875-MOPE0887
Adapting HIV Programmes to Systems with Limited Health Care Personnel
MOPE0888-MOPE0893

Effect of Training, Mentoring, and Supervision on HIV Processes and Outcomes
MOPE0894-MOPE0900
Managing HIV Supply Chain Challenges with Limited Resources
MOPE0901-MOPE0904
Supporting HIV Care: Innovations in Testing and Laboratory Support with Limited Resources
MOPE0905-MOPE0909
Developing/Implementing Chronic Disease Programmes in Resource-limited Settings
MOPE0910-MOPE0913
Working with What You Have: Improving Local Data Systems to Support HIV Programmes
MOPE0914-MOPE0919
Innovative Low Cost Solutions to Data Tracking for HIV Programmes
MOPE0920-MOPE0923
Using Mobile Phones/other Methods to Track Patient and for Programme Data
MOPE0924-MOPE0928
Innovative Approaches to Sharing/Disseminating Programme Data at the National, Regional, District, Site and Community Levels
MOPE0929-MOPE0933

Track F > Policy, Law, Human Rights and Political Science
Histories of Policy Responses to the Epidemic
MOPE0934-MOPE0935
Policy Determinants and Constraints
MOPE0936-MOPE0958
Influencing Policy Development
MOPE0959-MOPE0992
Advocacy and Lobbying by Civil Society, Affected Communities and People Living with HIV
MOPE0993-MOPE1007
Evidence-based Policy Development (Including Research as Method of Policy Change)
MOPE1008-MOPE1020
Multi-sectoral Policy Development (Including Collaboration in Advocacy across Movements or Sectors)
MOPE1021-MOPE1022
The Use and Influence of International Bodies in Policy Development and Change
MOPE1023
Community Participation as a Best Practice Tool for Policy Development
MOPE1024-MOPE1033
Development and Poverty Alleviation
MOPE1034-MOPE1036
Role of Multilateral Agencies and Donors
MOPE1037-MOPE1039
National and Local Government Financing
MOPE1040-MOPE1042
International Assistance and Funding Mechanisms
MOPE1043-MOPE1049
Ethical Issues in Priority Setting and Resource Allocation
MOPE1050-MOPE1051
Tuesday 20 July

Oral Abstract Sessions

TUAA01  Advances in Vaccine Development
TUAA02  When to Start: From Clinical Outcomes to Science
TUCA01  HIV Morbidity and Mortality
TUCA02  HIV Epidemiology: Trends and Patterns
TUCA03  Global Epidemics among MSM
TUAD02  Universal Access to Mental Health?
TUAE01  National Program Design for Mothers and Children
TUAF01  Refugees and Asylum Seekers and HIV: Deportation and Human Rights Violations
TUAF02  Criminalising Homosexual Behaviour: Human Rights Violation and Obstacle to Effective HIV/AIDS Prevention
TUAF03  Managing the Hydra: Dimensions of Intellectual Property and Access to Medicines
TUAX01  Missing in Transition: Disrupted Continuity of Care for Adolescents Living with HIV

Oral Poster Discussions

TUPD01  Role of Dendritic Cells in HIV Infection
TUPD02  ART in Children: Programmes Outcomes
TUPD03  HIV-related TB: Co-management and Outcomes
TUPD04  New Methodological Approaches in HIV Epidemiology
TUPD05  Prevention of Sexual Transmission of HIV
TUPD06  Law on The Street: Reforming Police Practice towards Sex Workers and People Who Use Drugs
TUPD07  Missing in Transition: Disrupted Continuity of Care for Adolescents Living with HIV

Poster Exhibition

Track A >  Basic Sciences
Viral Persistence and Latency
HIV Tropism, Dynamics and Fitness
Host Genetics of Resistance and Susceptibility
Host Restriction Factors Including APOBEC, TRIM and Others
Animal Models of Transmission, Disease Resistance and Progression
Mucosal Transmission

Track B >  Clinical Sciences
Impact of Co-factors/Viral Clade/Tropism/Genetic Factors
Prognostic Staging of Disease
Acute and Early Infection
Disease Burden – Morbidity/Mortality
HIV-2
New Monitoring Strategies Including Rapid Tests
Viral Resistance Testing in Clinical Trials and Practice
Viral Fitness and Tropism Assays, Utility and Application in Clinical Practice
AIDS Related Malignancies (KS, Lymphoma, Cervical and Anal Carcinoma) Including HIV Infection
Non-AIDS Related Malignancies
Acute and Early Infection and Management of Patients with Acquired Viral Resistance
Adherence in Adults
Adherence in Children and Adolescents

Track C >  Epidemiology and Prevention Sciences
Natural History, Progression and Survival
Trends in Morbidity and Mortality
Modeling HIV epidemics
Risk Factors for Acquisition of HIV
Risk Factors for Infectivity, Progression and Transmission of HIV
Epidemiology of HIV in the General Population, Women, Adolescents and Children
Epidemiology of HIV in People Who Use Drugs
Epidemiology of HIV in Male and Female Sex Workers
Epidemiology of HIV in Men Having Sex with Men
Epidemiology of HIV in Migrants
Epidemiology of HIV in Other Populations
Epidemiology of Risk Behaviour

Track D >  Social and Behavioural Sciences
Social Class, Social Structures, Poverty and Socioeconomic Stratification
Mobile and Immigrant Populations (Including People Living with HIV)
Family Structures, Kinship, and Social Safety Nets for Widows, Orphans and Other Vulnerable Groups
Violence: Gender, Social, Structural and Family-based
Social Construction of HIV-related Stigma, Layered Stigma, Marginalized Identities
TUPE0549-TUPE0584
448
Racism and Other Forms of Social Exclusion
TUPE0585
449
Media and Cultural Representations
TUPE0586-TUPE0694
456
Religious Institutions and Faith Communities
TUPE0695-TUPE0605
458
Cultural Understandings of Health and Illness, Caring and Curing
TUPE0606-TUPE0612
461
Socio-historical Analyses of HIV/AIDS
TUPE0613-TUPE0620
462
Social Movements and HIV
TUPE0621-TUPE0626
464
Other Societal Conditions or "Drivers" Related to HIV Risk and Vulnerability
TUPE0627-TUPE0661
465
Gender Inequalities
TUPE0662-TUPE0675
473
Sexual Meanings, Identities and Communities (Cross-cutting or General)
TUPE0676-TUPE0682
476
Gay and Other Homosexually Active Populations
TUPE0683-TUPE0704
478
Lesbian, Bisexual, Transgender and/or Intersexual Identity
TUPE0705-TUPE0706
483
Effects of Homophobia
TUPE0707-TUPE0711
483
Masculinity/Masculinities
TUPE0712-TUPE0714
484
Young People and Sexuality
TUPE0715-TUPE0744
485
Relationships, Partnerships - Social and Emotional Aspects
TUPE0745-TUPE0756
492
Multiple and/or Concurrent Sexual Partnerships
TUPE0757-TUPE0769
494
Abstinence, Monogamy and Sexual Fidelity
TUPE0770-TUPE0773
497
Reproductive Health, Fertility, Sexuality –values, Roles and Other Impact of Culture and Society
TUPE0774-TUPE0789
498
Sexual Networks
TUPE0790-TUPE0791
502
Sex Work and Other Forms of Transactional Sex
TUPE0793-TUPE0814
502
Other Sexuality, Gender, Relationships and Sexual Cultures
TUPE0815-TUPE0823
508
Impact of HIV Funding on Total Health Expenditures
TUPE0903-TUPE0905
528
Insurance Schemes for HIV
TUPE0906-TUPE0910
529
Performance-based Payment for HIV Services
TUPE0911
530
Co-payments and Out-of-pocket Expenditures: Impact on Adherence and Outcomes
TUPE0912
530
Cost-effectiveness of Optimizing Diagnostics and Monitoring Tools
TUPE0913-TUPE0914
530
Cost-effectiveness of Improving Monitoring of HIV Outcomes and its Major Complications
TUPE0915-TUPE0917
531
Cost-effectiveness of Management of Health Care Systems
TUPE0918-TUPE0920
532
Cost-effectiveness of Programmes Oriented toward Improvement of Human, Community, and Institutional Capacity
TUPE0921
532
Cost-effectiveness of HIV Prevention and Management Strategies
TUPE0922-TUPE0930
533
Impact of HIV Treatment on Earned and Family Income
TUPE0931
535

Impact of HIV Treatment on Earned and Family Income
TUPE0931
535
Strategies
TUPE0921
532
Cost-effectiveness of Management of Health Care Systems
TUPE0918-TUPE0920
532
Cost-effectiveness of Programmes Oriented toward Improvement of Human, Community, and Institutional Capacity
TUPE0921
532
Cost-effectiveness of HIV Prevention and Management Strategies
TUPE0922-TUPE0930
533
Impact of HIV Treatment on Earned and Family Income
TUPE0931
535

Racism and Other Forms of Social Exclusion
TUPE0585
449
Media and Cultural Representations
TUPE0586-TUPE0694
456
Religious Institutions and Faith Communities
TUPE0695-TUPE0605
458
Cultural Understandings of Health and Illness, Caring and Curing
TUPE0606-TUPE0612
461
Socio-historical Analyses of HIV/AIDS
TUPE0613-TUPE0620
462
Social Movements and HIV
TUPE0621-TUPE0626
464
Other Societal Conditions or "Drivers" Related to HIV Risk and Vulnerability
TUPE0627-TUPE0661
465
Gender Inequalities
TUPE0662-TUPE0675
473
Sexual Meanings, Identities and Communities (Cross-cutting or General)
TUPE0676-TUPE0682
476
Gay and Other Homosexually Active Populations
TUPE0683-TUPE0704
478
Lesbian, Bisexual, Transgender and/or Intersexual Identity
TUPE0705-TUPE0706
483
Effects of Homophobia
TUPE0707-TUPE0711
483
Masculinity/Masculinities
TUPE0712-TUPE0714
484
Young People and Sexuality
TUPE0715-TUPE0744
485
Relationships, Partnerships - Social and Emotional Aspects
TUPE0745-TUPE0756
492
Multiple and/or Concurrent Sexual Partnerships
TUPE0757-TUPE0769
494
Abstinence, Monogamy and Sexual Fidelity
TUPE0770-TUPE0773
497
Reproductive Health, Fertility, Sexuality –values, Roles and Other Impact of Culture and Society
TUPE0774-TUPE0789
498
Sexual Networks
TUPE0790-TUPE0791
502
Sex Work and Other Forms of Transactional Sex
TUPE0793-TUPE0814
502
Other Sexuality, Gender, Relationships and Sexual Cultures
TUPE0815-TUPE0823
508

TUPE0932-TUPE0945
536
TUPE0946-TUPE0960
539
TUPE0961-TUPE0962
542
TUPE0963-TUPE0968
543
TUPE0969-TUPE0970
544
TUPE0971-TUPE0974
544
TUPE0975-TUPE0979
545
TUPE0980-TUPE0988
546
TUPE0989-TUPE1006
548
TUPE1007
552
TUPE1008
552
TUPE1009-TUPE1021
553
TUPE1022-TUPE1028
555
TUPE1029-TUPE1035
557
TUPE1036-TUPE1038
558
TUPE1039-TUPE1041
559
TUPE1042-TUPE1043
560
TUPE1044-TUPE1045
560
TUPE1046-TUPE1047
561
TUPE1048-TUPE1053
561

Author Index
563
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)
Abstract Book Volume 1 | www.aids2010.org

MOAA0101

Exclusion of HIV-1 proviral DNA using tre-recombinase: an experimental update

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Background: Previously, we have engineered a LTR-specific recombinase (Tre) that permits the excision of HIV-1 proviral DNA in vitro (Sarkar et al. 2007 Science 316:1912). This suggests that customized enzymes might someday help to eradicate HIV-1 in infected individuals. Here, we provide an update on our recent functional analyses of our Tre-recombinase.

Methods: The efficacy of the Tre-recombinase was investigated in vitro in cell culture and in vivo in the humanized Rag2-/- gamma c-/- mouse model. Animals were transplanted either with human adult CD4+ lymphocytes or cord-blood derived CD34+ hematopoetic stem cells (HSC) both transduced with Tre-expressing lentiviral SIN-vectors. Upon engraftment animals were infected with HIV-1 and virus load and CD4+ cell counts were monitored. Finally, lymphoid tissues of selected animals were subjected to immunohistological analyses. Furthermore, to exclude possible toxic effects of the Tre-recombinase, transduced cells were analysed regarding cell cycle control, cell viability, apoptosis, and HSC potential.

Results: We demonstrate that the Tre-recombinase expression correlates with a substantial decrease in viral loads both in vitro and in vivo as well as with pronounced CD4+ T cell protection in vivo. In addition no cytotoxicity was observed after transduction of cells with the Tre-expressing lentiviral SIN vectors.

Conclusions: In sum we consider tailored recombinases such as Tre essential to the development of novel antiretroviral therapies of the post-HAART era.

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MOAA0102

Novel HIV-1 protease inhibitors (PIs) containing bis-tetrahydrofuran (bis-THF) and a novel polycyclic ligand

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Background: Previous studies have shown that the protease (PR) is a potential target for HIV-1 as it displays specific structural features that allow the design of novel protease inhibitors (PIs). PR dimerization inhibition activities with high genetic barrier. It is warranted that the compounds be further studied as potential therapeutics for HIV-MDR, which have been shown to be drug resistant to other classes of antiretroviral drugs. Continuous efforts are required to develop more potent and safer therapeutics with high genetic barrier.

Methods: Both PR enzymatic activity inhibition and PR dimerization inhibition activities of the compounds were compared in the context of structure-activity relationships.

Conclusions: The compounds examined here had both PR enzyme and PR dimerization inhibition activities with high genetic barrier. It is warranted that the compounds be further studied as potential therapeutics for HIV-MDR infection.

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MOAA0103

S/GSK1265744: a next generation integrase inhibitor (INI) with activity against raltegravir-resistant clinical isolates

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Background: S/GSK1265744 is a once daily unboosted INI that is being developed as a backup to the once daily boosted integrase inhibitor, S/GSK134952. Susceptibility to S/GSK1265744 and raltegravir (RAL) was determined for INI resistant clinical isolates from therapy experienced patients treated with RAL plus optimized background regimen.

Methods: Thirty-nine clinical isolate samples were examined; 30 had IN codon region mutations and 22 of those were longitudinal samples from 9 patients. Mutations included those from the three main RAL resistance pathways as well as more complex mixtures such as E92Q,N155H/G140C/G145R; and E138G/E138K/G140D/G148V/H151N/A. Susceptibility was evaluated by using Monogram Biosciences Integrate PhenoSense assay.

Results: Median FC in IC50 against the 30 IN-mutant isolates was 2.26 (range=0.91-40) for S/GSK1265744, and >81 (range=3.74->87) for RAL. Representative mutant fold change (FC) in IC50 versus wild-type.

Genotype S/GSK1265744 FC Median (Range) RAL FC Median (Range) N

<table>
<thead>
<tr>
<th>Genotype</th>
<th>S/GSK1265744 FC Median (Range)</th>
<th>RAL FC Median (Range)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>N155H</td>
<td>1.92 (1.60-2.34)</td>
<td>19.0 (14.0-36.0)</td>
<td>5</td>
</tr>
<tr>
<td>G140Q,G148R</td>
<td>6.91 (3.52-40)</td>
<td>&gt;87 (58.0-&gt;87)</td>
<td>7</td>
</tr>
<tr>
<td>G140Q,G148R</td>
<td>23 (13-33)</td>
<td>&gt;87 (&gt;67-&gt;87)</td>
<td>2</td>
</tr>
<tr>
<td>T97A,T114R</td>
<td>1.10 (1.07-1.12)</td>
<td>&gt;81 (&gt;81-&gt;81)</td>
<td>2</td>
</tr>
</tbody>
</table>

Conclusions: S/GSK1265744 exhibited in vitro activity against raltegravir-resistant clinical isolates. These data revealed S/GSK1265744 to be active against RAL, and consistent with potential for S/GSK1265744 to treat patients with RAL resistance.

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MOAA0105

The LEDGINS: rational design of first in class LEDGF/p75-integrase inhibitors with potent antiviral activity

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Background: In 2007 the Food and Drug Administration granted accelerated approval for the first in class (MK-0181), the first integrase (strand transfer) inhibitor. Soon after its introduction into the clinic, resistance development in patients demonstrated the necessity to develop novel second generation integrase inhibitors. In 2003 we identified LEDGF/p75 as a cellular co-factor inhibiting the LEDGF/p75-IN interaction and HIV replication in the nanomolar range (EC50=114±64 nM) and with high selectivity (SI=1152). ADMETox and pharmacokinetic properties demonstrated the potential of the 2-(quinolin-3-yl)acetic acids for further pre-clinical development. We describe the discovery of the first selective small molecules targeting the LEDGF/p75-IN interaction in vitro and in cell culture. The lack of cross-resistance with raltegravir and elvitegravir as well as its binding mode into an integrase, as demonstrated by crystalization, defines the LEDGINS as genuine allometric second generation integration inhibitors. By medicinal chemistry we have established a solid structure-activity relationships database. We evaluated LEDGINS not only gives proof-of-concept that virus-host interactions are genuine drug targets for antiviral therapy but also demonstrates their potential for further pre-clinical development.

Results: 2-(quinolin-3-yl)acetic acids inhibit the LEDGF/p75-IN interaction in vitro and in cell culture. Compounds with highest antiviral activity have been analyzed for their ADMETox and preliminary pharmacokinetic profile.

Conclusions: We describe the discovery of the first selective small molecules inhibiting the LEDGF/p75-IN interaction and HIV replication in the nanomolar range (EC50=114±64 nM) and with high selectivity (SI=1152). ADMETox and pharmacokinetic properties demonstrate the potential of the 2-(quinolin-3-yl)acetic acids for further pre-clinical development.

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MOAA0102

Simplification from protease inhibitors to once or twice daily raltegravir: the ODIS trial

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Background: Raltegravir (RAL) has demonstrated good antiviral activity and safety profile being dosed twice daily (BID) (FDA approval). Time to terminal elimination half-life may allow once-daily (QD) administration. Methods: All HIV-infected individuals under protease inhibitor (PI)-based regimens with plasma HIV-RNA < 50 copies/ml for longer than 24 weeks were identified at our clinic and replaced PIs by RAL. Patients were randomly assigned to RAL 800mg QD, 400mg BID, or BID for the first three months and then QD (www.clinicaltrials.gov NCT00941083).

Results: 222 patients completed 24 weeks on (149 QD, 35 BID, and 38 BID to QD arm). The most frequently replaced PIs were atazanavir (48%), lopinavir (28%) and fosamprenavir (13%). Up to 69% of patients received RAL along with tenofovir-emtricitabine and 31% with abacavir-lamivudine. Baseline mean CD4 count was 574±303 cells/μl and 46% were HIV-co-infected. Within 24 weeks, 13 (5.9%) patients experienced virological failure, 12 (6.4%) in the QD and 1 (2.9%) in the BID arm (p=0.18). Virological failure rate was 16.2% (12/74) in patients with prior NRTI resistance but only 5.7% (9/158) in the rest (p<0.001). Significant reductions in total, LDL and HDL cholesterol were observed at 24 weeks of RAL switching.

MOAB01 Antiretroviral Therapy: New Drugs and Novel Strategies

MOAB0101

Lopinavir/ritonavir combined with raltegravir demonstrated similar antiviral efficacy and safety as lopinavir/ritonavir combined with tenofovir disoproxil fumarate/emtricitabine in treatment-naïve HIV-1 infected subjects

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Background: Ritonavir-boosted antiretroviral therapy may show a better lipid profile while being as effective as raltegravir-based antiretroviral therapy in selected patients. Methods: SPiral is a 48-week multicentre, comparative, open-label trial in which HIV-infected adults with < 50 copies/ml of plasma HIV RNA for at least the previous 6 months on ritonavir-boosted protease inhibitor-based therapy were randomized (1:1) to switch from raltegravir-boosted protease inhibitor to raltegravir or to continue on same regimen. Primary endpoint was the proportion of patients free of treatment failure (Non-completer=failure) at 48 weeks.

Results: SPIRAL study was powered to show non-inferior efficacy of raltegravir-based therapy with a margin of -12.3%. DSMB recommended continuing SPIRAL study after an unplanned analysis following SWITCHMM trials interruption.

Conclusions: A switch from PIs to RAL in HIV-infected patients with unde- tectable plasma HIV-RNA effectively sustains viral suppression, as long as prior NRTI resistance had not been selected. No significant differences were seen comparing RAL BID or QD in this context, although QD dosing tended to perform well.

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MOAB0103

Simplification of antiretroviral therapy by switching from ritonavir-boosted protease inhibitors to raltegravir in virologically suppressed HIV-1-infected patients (SPIRAL): a randomised open-label trial

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Background: Ritonavir-boosted protease inhibitors are recommended agents for HIV infection, but they have been associated with a higher risk of cardio- vascular disease due at least in part to lipid effects. Raltegravir-based anti- retroviral therapy may show a better lipid profile while being as effective as ritonavir-boosted protease inhibitor-based antiretroviral therapy in selected patients. Methods: SPIRAL is a 48-week multicentre, comparative, open-label trial in which HIV-infected adults with < 50 copies/ml of plasma HIV RNA for at least the previous 6 months on ritonavir-boosted protease inhibitor-based therapy were randomized (1:1) to switch from raltegravir-boosted protease inhibitor to raltegravir or to continue on same regimen. Primary endpoint was the proportion of patients free of treatment failure (Non-completer=failure) at 48 weeks.

Results: Two hundred and seventy three patients assigned to switch to raltegravir (n=139) or to continue on ritonavir-boosted protease inhibitor (n=134) were included in the analysis. At 48 weeks, 89% (raltegravir-based therapy) and 87% (ritonavir-boosted protease inhibitor-based therapy) of patients remained free of treatment failure (difference 2.6%, 95% CI -2.5% to 7.5%). Switching to raltegravir was associated with significant decreases in plasma lipids relative to continuing ritonavir-boosted protease inhibitors. Severe adverse events and study drug discontinuations due to any adverse event occurred in 4% and 2% of patients respectively in each group.

Conclusions: In patients with sustained virological suppression on ritonavir-boosted protease inhibitor-based therapy, switching from raltegravir-based

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TBR-652, a potent dual chemokine receptor 5 (CCR5)/CCR2 antagonist in phase 2 development for treatment of HIV infection

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Background: TBR-652, a potent dual CCR5/CCR2 antagonist, was well tolerated in Phase 1 studies that showed the feasibility of once-daily dosing. The first study of once-daily TBR-652 in 54 HIV-1-infected patients is reported here.

Methods: This was a randomized (4:1 to TBR-652), double-blind, placebo-controlled, dose-escalating study to assess the antiviral activity, safety, and tolerability of TBR-652 monotherapy given orally once daily (QD) for 10 days in HIV-1-infected, antiretroviral treatment-experienced, CCR5 antagonist-naive, CCR2-positive patients. Patients received 25, 50, 75, 100, or 150 mg TBR-652 or placebo. Antiviral activity was monitored by changes in HIV-1 RNA and CCR2 activity was measured by changes in MCP-1 levels from baseline.

Results: TBR-652 monotherapy was generally well tolerated for 10 days at all dose levels, with predominantly grade 1 AEs, no serious AEs, no deaths, and only 1 discontinuation during dosing (not related to study drug).

Conclusions: TBR-652 was generally safe and well-tolerated. There was potent antiviral activity and a significant effect on HIV-1 RNA and MCP-1 levels. This confirms that TBR-652 is a potent CCR5/CCR2 antagonist. To determine the clinical relevance of this finding, further investigation of TBR-652 is warranted in future studies.

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**MOAB0105**

Activity of a next generation integrase inhibitor (INI), S/GSK1349572, in subjects with HIV exhibiting raltegravir resistance: initial results of VIXING study (ING112961)

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Background: S/GSK1349572, a novel INI, demonstrated potent activity in a Phase 2a study and has limited cross-resistance to raltegravir (RAL) and elvitegravir in vitro. The activity of S/GSK1349572 is being explored in an ongoing 24-week Phase 2b study involving subjects with RAL-resistant HIV.

Methods: 27 antiretroviral therapy-experienced, adult subjects, with screening plasma HIV-1 RNA ≤1000c/mL showing genotypic resistance to RAL and ≥2 mutations, were enrolled. The screening integrase-coding region genotypes included Q148H/K/R alone or with ≥ one Q148-associated mutation. E148Q and other ART classes, were allowed. Subjects received S/GSK1349572 50mg QD while continuing their failing regimen (without RAL) to Day 11 where the background regimen was optimised, where feasible, and S/GSK1349572 continued. The antiviral activity through Day 11 (for primary endpoint), and available safety data are presented.

Results: The median (range) fold-changes (FC) in susceptibility vs wild-type at Baseline were 161 (0.57- >166, n=27) to RAL and 1.46 (0.55-3.5, n=27) to S/GSK1349572. By Day 11, 21 of 27 subjects achieved plasma HIV-1 RNA <400 c/mL or ≥0.7 log10 c/mL decline (primary endpoint), although the number of responders differed according to Baseline INI genotype: 16/16 with N155H or V143H or Q148 single mutant pathways; 3/4 with Q148 plus one mutation; 5/5 with Q148 plus ≥2 mutations; 2/2 other. A strong correlation between baseline FC to S/GSK1349572 and Day 11 change from baseline in plasma HIV-1 RNA was observed (correlation r=0.79, p-value < 0.001). S/GSK1349572 was well tolerated: the most frequent AEs were diarrhea (n=3) and insomnia (n=3), two subjects experienced an SAE considered unrelated to study drug.

Conclusion: Despite the high level resistance to raltegravir, the majority of subjects showed good antiviral responses through Day 11 of this pilot study. The ongoing study continues to characterise S/GSK1349572 activity against a wide range of RAL resistant viruses including low frequency variants.

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**MOAB02 Treatment of Children: HIV in Children, Prognosis and Outcomes of Treatment**

**MOAB0201**

The cell-associated HIV-1 DNA level after 15 years of perinatal infection is strongly correlated with lifetime viral replication - The ANRS-EP38-IMMIP Study


Background: The virological and immune status of perinatally infected adolescents and young adults has been only poorly characterized. The cell-associated HIV-DNA level is both an indicator of the level of cellular reservoirs and an independent predictor of disease progression. We aimed here to study the HIV-1 DNA level at 15 years or more in relation to lifetime viral replication and treatment history.

Methods: In 2007-09, the ANRS-EP38-IMMIP study included 93 perinatally infected patients with unchanged therapeutic strategy for at least 6 months, followed since birth in the French Pediatric Cohort ANRS CD102, or who initiated care before 1996. A blood sample was taken for biological evaluations. HIV-DNA was quantified by real-time PCR (ANRS assay) for 91 patients.

Results: Among the 91 patients, 43% were male. Median age was 17 years (IQR:2.5-3.2). 14% of patients were off HAART. In the whole group, 65% of patients had undetectable HIV-RNA (< 80 copies/ml), median CD4 cell count was 588/µl (IQR:421-900), and median HIV-DNA load was 2.84 (IQR:2.51-3.17) log copies/10^6 PBMC. Among currently treated and untreated patients, HIV-RNA was undetectable in 76% and 0% (p < 0.0001), median CD4 cell count was 616 and 424 µl (p < 0.008), and median HIV-DNA levels was 2.83 and 3.15 log copies/10^6 PBMC (p < 0.05), respectively. HIV-DNA was correlated negatively with current CD4 cell count (R:0.34; p=0.001), cumulative duration of HAART (R: -0.29; p=0.006) and positively with CD8 cell count (R:0.33;p=0.003) and HIV-RNA (R:0.44; p< 0.001). HIV-DNA was correlated with cumulative HIV-RNA load over the last 10 years (R:0.54, p< 0.001). In multivariate analysis, the association between HIV-DNA and cumulative HIV-RNA viremia remained significant, after adjustment for current HIV-RNA detectability, current HAART and cumulative duration of HAART.

Conclusions: These are the first data describing HIV-DNA levels after 15 years of perinatal infection. HIV-DNA was strongly correlated with level of lifetime HIV-RNA and reflects the viral control over time.

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MOAB0202
18-month mortality, and loss-to-program in ART-treated children in Asia and Africa: the International Epidemiologic Databases to Evaluate AIDS (IeDEA) pediatric multi-regional collaboration
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Background: We studied the 18-month probability and determinants of mortality and loss-to-program after ART initiation in a multi-regional analysis within the pediatric IeDEA collaboration.

Methods: HIV-infected children (positive PCR < 18 months or positive serology ≥218 months) ≥15 years initiating ART based on WHO 2006 criteria in 8 regions were eligible. Standardized data were collected through regional questionnaires. We analyzed mortality and loss-to-program at 18 months after ART initiation (ie., death + loss-to-follow-up: not seen for >3 months since last clinic visit or lost to follow-up) using Kaplan-Meier estimates.

Results: Data on 15 340 children from 56 clinics, including 11 sites in Asia (N=1718), 25 in East Africa (n=4521), 10 in Southern Africa (n=6212) and 10 in Western Europe (n=3932) were analyzed. Median age at ART initiation was 5 years; median CD4 percentage was 12%. At 18 months after ART initiation, 810 (9.1%) were lost to follow-up and 3878 (25.3%) were lost to program. The crude probability of death was 5.4% in Asia, 4.9% in East Africa, 6.3% in Southern Africa, and 8.2% in Western Europe (p<0.0001). Young age (<12 mo), a weight-for-age z-score < -3, Hb<7 g/dl, a WHO stage 4, and immunodepression at baseline were significantly associated with poorer survival. The crude probability of loss-to-program was 15.1% in Asia, 27.6% in Eastern Africa, 29.4% in Southern Africa and 37.2% in Western Africa (<p <0.0001). Young age (<12 mo), a weight-for-age z-score < -3, Hb<7 g/dl, a WHO stage 4, and immunodepression or missing CD4 at baseline, and having initiated ART after 2005, were significantly associated with a higher loss-to-program.

Conclusions: There is a high rate of loss-to-program across regions and poor survival. Innovative and feasible approaches to retain children in ART programs are urgently needed.

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MOAB0203
Virologic outcomes on second line antiretroviral therapy (ART) for HIV-infected Tanzanian children with and without clinical or immunologic failure at ART switch
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Background: Use of clinical and immunologic guidelines alone to determine antiretroviral treatment failure among HIV-infected persons may lead to pro- longed undiagnosed viremia that limits the effectiveness of future therapy.

Methods: Children in HIV care who had received ≥180 days of first line, non-nucleoside reverse transcriptase (NNRTI)-based ART underwent HIV RNA testing. Genotypic resistance testing was performed on samples with HIV RNA ≥1000 copies/mL, and children were observed for 13 months to determine clinical staging events, medication regimen, HIV RNA levels, and CD4+ cell count. Clinical or immunologic failure of first line antiretroviral therapy (CFP) was defined by World Health Organization guidelines. Virologic failure (VF) was defined as HIV RNA decline <1 log, after 70 days or ≥400 copies/mL, after 180 days ART.

Results: At baseline, 67 (32.5%) of 206 children who had received a mean (range) of 2.3 (0.5-5.3) years of first line ART had VF; 6 of these (8.9%) had CFP. 25/170 (14.7%) had resistance mutations; 39 (95.1%) had M184V, 21 (51.2%) had thymidine analogue mutations (TAMs), and all had NNRTI mutations including 17 (43.9%) K103N. For children seven (82.4%) of 57 children with ≥180 days of follow up data had initiated second line ART. Follow-up HIV RNA levels were available for 25 children after a mean (range) of 170 (70-280) days on second line ART; 8 (32.0%) had ≥1000 copies/mL, 2 (8.0%) had C/FJ. HIV RNA ≥100,000 copies/mL prior to the initiation of second line ART was detected in 8 (32.0%) of the 25 children and exhibited a trend toward association with subsequent VF (OR 5.4, p=0.06).

Conclusions: The majority of children with VF on NNRTI-based ART treated within a public health approach were subsequently virologically suppressed on PI-based therapy despite multiple nucleoside resistance mutations. Those with HIV RNA ≥100,000 may be at increased risk for subsequent failure of second-line.

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MOAB0204
Triple class virologic failure in HIV-infected children
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Background: Virologic failure of three drug classes during childhood may limit future treatment options.

Methods: Within the Collaborative Observational HIV Epidemiological Research Europe (COHERE), perinatally HIV-infected children aged <16 years, starting ART with at least three drugs, between 1998-2008, were studied. Virologic failure of a drug was defined by a viral load >500 copies/ml despite 4 months of continuous use; triple-class virologic failure (TCVF) was defined as virologic failure of two NRTIs, an NNRTI, and a ritonavir-boosted PI (P/r).

Results: 1007 children were included; 51% male, 21% with a previous AIDS diagnosis, median (IQR) age at ART initiation 4.2 (0.9-8.5) years. 63 (6.3%) developed TCVF after a median of 4.2 (2.4-6.5) years. The incidence of TCVF increased with time on ART; by 5 years after starting ART an estimated 7.3% (95% CI: 5.2%-9.4%) of children had TCVF, higher than in adults in COHERE (HR 1.6 (95% CI 1.3-2.1), p < 0.001). In multivariate analysis, older age at ART initiation and previous AIDS diagnosis were associated with an increased risk of TCVF (p=0.055 and 0.02 respectively). NRTI, NNRTI and PI/r mutations were detected in 72% (26/36), 97% (28/29) and (0%) (0/15) respectively of those with a resistance test while taking a drug of the corresponding class.

Conclusions: More than 90% of HIV-infected children starting ART did not develop virologic failure of the three original drugs classes. Younger children at ART initiation and those without AIDS had a lower risk of TCVF. However the rate of TCVF was higher than in adults, highlighting the need for the development of new drugs and appropriate paediatric formulations.

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 MOAB0205
Rates and determinants of adherence to antiretroviral therapy (ART) in infants, children and adolescents: a systematic review
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Background: Achieving and maintaining high levels of adherence to antiretroviral therapy (ART) in HIV-infected children is necessary for improved growth and development and decreased morbidity and mortality.

Methods: To assess rates and determinants of ART adherence among infants, children and adolescents, we searched 9 electronic databases through September 2009 for published observational studies reporting ART adherence rates/proportions among individuals <18 years. Data were abstracted in duplicate on adherence outcomes, thresholds used to define adherence, measurement, determinants of adherence, and relationships between adherence and viral load and/or CD4 count/percent.

Results: Sixty-six studies met the inclusion criteria. Adherence assessment methods, time window for assessment, and thresholds for defining adherence were inconsistent across studies. Where assessed, higher level of ART adherence was consistently shown to be associated with viral load suppression. Factors associated with adherence included caregiver socio-demographic characteristics; cognitive, and psychosocial characteristics; adherence to social and family functions; treatment/medication characteristics; use of reminders; and structural factors. Disclosure of HIV status to children was found to be associated with adherence in some but not all studies where assessed.

Conclusions: In preparation for the global scaling-up of pediatric ART, there is an urgent need for the development of reproducible measures of adherence in children, and for testing strategies to improve adherence among children and adolescents.

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MOAB0301

**TB/HIV integration: lessons learned from implementation of a TB/HIV “one stop shop” at primary health care clinics in rural Lesotho**

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**Background:** Lesotho has the third highest HIV prevalence (23.2%) and the fourth highest TB incidence (637/100,000 people per year) in the world. There is a need for successful integration of TB/HIV services is essential to tackle this huge dual epidemic. In January 2006, Medecins Sans Frontieres and the MOHSW launched a pilot programme to provide nurse-driven HIV/AIDS care and treatment at the primary care level, including a “one stop shop” enabling both TB and ART treatment to be delivered at PHC level. We describe the impact of this intervention.

**Methods:** Nurses were trained in TB/HIV care including initiation of antiretroviral therapy and the use of a sputum negative algorithm. TB/HIV lay counsellors were trained to give adherence counselling for both therapies. Infection control policies were implemented at all sites and weekly specimen collection established to each clinic. A retrospective analysis of TB registers in six TB/HIV integration sites was made using an excel database to analyse indicators of TB/HIV integration.

**Results:** Total TB cases identified and treated at PHC level rose from 105 cases in 2006 to 332 in 2009. The proportion of sputum negative and EPTB cases identified increased from 10% to 48% of cases between 2006 and 2009. In 2009 93% of TB cases were tested for HIV (78% positive), 92% received cotrimoxazole prophylaxis and 81% received ART. The treatment success rate in coinfected and non coinfected patients respectively was 65% and 77% in 2007 and 70% and 79% in 2008.

**Conclusions:** By providing an integrated HIV/TB service at primary care level access to outcomes and services can be improved. When patient transport costs act as a major barrier to accessing treatment, decentralisation of both these services has a marked benefit to HIV/TB coinfected patients.

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MOAB0302

**Clinical characteristics and outcomes of a cohort of HIV infected patients with culture positive TB coinfection in Guangxi, China**

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**Background:** Mortality and morbidity is high in HIV/TB coinfected patients in developing countries. Few studies have reported on the characteristics and overall outcomes of Chinese patients with TB/HIV coinfection.

**Methods:** Patients who were diagnosed with culture positive TB in four clinics among 4950 patients in Guangxi, China from Aug, 2006 to Dec, 2008 were identified and followed over 12 months, with the primary outcomes of interest being the patient’s vital status at 12 months. Kaplan-Meier method and Cox proportional hazards model were used to estimate 1 year survival and to identify factors associated with mortality respectively.

**Results:** A total of 201 patients were identified, and mortality at 12 months was 23.4%. Median CD4 count at TB diagnosis was 37 cells/mm3 (IQR 16-102). Pulmonary TB was diagnosed in 176 (88%), extrapulmonary TB in 68 (34%) and both in 43 (21%) patients. Among the 156 subjects with TB drug resistance results, 62 (38%) had any drug resistance, and 6 (3.8%) patients had multidrug resistance (MDR). Resistance to isoniazid, rifampin, ethambutol, and streptomycin were seen in 38 (24%), 15 (10%), 26 (17%), and 26 (17%) patients respectively. 149 (74.1%) patients received ART during followup and 169 (84%) who received TB treatment. Cox proportional hazard model showed that BMI<18 (AHR, 2.81; 95%CI, 1.49-5.29), ART (AHR, 4.0; CI 2.1-7.7) and TB treatment (AHR, 5.6; CI 2.9-11) were independently associated with lower mortality. People who received ART, with typical CXR and sputum smear were more likely to receive TB treatment. Middle school education or higher and being married were associated an increased chance of ART treatment.

**Conclusions:** Inadequate treatment is a major cause for high mortality among HIV/AIDS patients, with HIV/TB coinfected, integrated administration of ART and TB chemotherapy will be the most important factors for improving survival in this setting.

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MOAB0303

**Value of the tuberculin skin testing for isoniazid preventive therapy for HIV-infected patients**

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**Background:** Isoniazid preventive therapy (IPT) has been shown to be effective at reducing TB incidence among HIV-infected patients, particularly in conjunction with HAART. However, controversy continues regarding tuberculin skin testing (TST) for identifying HIV-infected patients most at risk for TB.

**Methods:** We compared TB risk by TST and HIV status among a large cohort of people in the THRio HIV cohort, from Rio de Janeiro, Brazil. TB and IPT naïve patients were analysed from HIV diagnosis until TB diagnosis, death, or censoring at last follow-up. Cox proportional hazards models compared TB risks across TST categories.

**Results:** Among 12,167 patients (36,286 person-years( PY) of follow-up) there were 615 TB cases confirmed by smear or culture. In univariate analysis, TST-positive patients were 2.4 times more likely to develop TB, compared to TST-negative patients (95% confidence interval: 1.7-3.2). After adjusting for age, sex, race, and HIV status, the association remained statistically significant (AHR, 1.7; 95% CI 1.2-2.4). No other variables tested were associated with TB risk.

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MOAB0401

Neurocognitive function in HIV-positive children in a developing country

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Background: Despite increased access to antiretroviral therapy in resource-limited settings, HIV encephalopathy remains an important cause of morbidity in infected children. We aimed to characterize neurocognitive outcomes in a prospective cohort of infected children attending four pediatric clinics in the Kingston Metropolitan Area, Jamaica.

Methods: The neurocognitive outcomes of 287 children between September 2002 and August 2008 were characterized; prevalence of HIV encephalopathy (CDC criteria, 1994) determined, and change in neurocognitive outcome 12-months post-initiation of highly active anti-retroviral therapy (HAART) compared using paired T-test.

A nested case-control study conducted between July - September 2009 used fifteen randomly selected encephalopathic children (aged 7-10 years) who were age, gender, education, residence and ARV-matched with non-encephalopathic controls.

Neurocognitive function was evaluated using clinical assessment and the following tests: concept formation (Raven's Coloured Progressive Matrices), short-term memory (visuo-spatial - Corsi Blocks and auditory - Digit Span), selective attention (Test of Everyday Attention for Children), and fine motor and coordination function (Posting Coins, Grooved Pegboard, and Hand Pronation-Supination). Outcomes were compared using Fisher's Exact and Mann Whitney U tests.

Results: Sixty-seven (23.3%) children (35/52.2% male) were diagnosed with HIV encephalopathy. Median age at diagnosis of encephalopathy was 1.57 years (interquartile range [IQR] 1.68 - 3.43). Vertical transmission was the predominant mode of transmission (64/95.5% encephalopathic, and 194/98.8% non-encephalopathic). Prevalent comorbidities at disclosure (n=67) included delayed motor milestones (59/88.1%), hyperactivity (59/88.1%), apathy (50/64.6%), microcephaly (42/62.7%) and quadriparesis (21/31.4%). No significant reduction in prevalence of neurodevelopmental abnormalities was seen 12-months post-HAART. Enecephalopathic children achieved lower scores for tests of concept formation, short-term memory and selective attention, and required a longer duration to complete tests of fine motor and coordination when compared to controls (p<.05).

Conclusions: HIV infection impairs neurocognitive function in infected children. As these children transition into adulthood, characterization of neurocognitive impairment and rehabilitation become important foci for healthcare providers.

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MOAB0402

High prevalence and particular aspects of HIV-related neurological complications in a Romanian cohort of HIV-infected children and young adults

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Background: We aimed to study the prevalence and characteristics of central nervous system (CNS) HIV-related complications from a well-characterized homogenous cohort of Romanian young adults. This unique cohort include patients infected with HIV F clade, during their first years of life and exposed for a decade combined antiretroviral treatment (ART).

Methods: Evaluation during 1996-2009 of HIV-related neurological complications, their dynamics, particular features. Neurocognitive impairment was evaluated in a subgroup of young adults based on the current HIV Associated Neurocognitive Disorders (HAND) criteria.

Results: CNS complications were found in 73% of 127 patients with AIDS defining diseases (43.7%). Within this group, 111 had HIV encephalopathy (HIVE), 27 tuberous meningitis, 27 cryptococcal meningitis, 25 Progressive Multifocal Leuкоencephalopathy (PML), 24 CNS toxoplasmosis, 2 CMV encephalitis, recurrent bacterial meningitis. Although the number of HIV and opportunistic CNS complications decreased after introduction of ART, their proportion among AIDS defining diseases remained unaffected. PML patients particular features were cerebellar and brainstem lesions, survived with improved survival with HAART regimens. Out of 49 patients evaluated using HAND definitions, 47% had various degrees of neurocognitive deficits, especially in motor (55%) and speed of information processing (53%) domains.During two consecutive measles outbreaks we described in 45 adolescents a severe particular complication of measles named by us subacute myoclonic measles encephalitis. Recently we demonstrated in 11 patients the presence of HBV DNA in CSF and genetic variation of HBV between CSF and plasma in a subgroup of 4 patients.

Conclusions: We found a high prevalence of neurocognitive impairment and of AIDS-defining opportunistic diseases among this particular cohort, suggesting a neuroepidemiological pattern of F-clade. Mechanisms underlying these are highlighted from this cohort: subacute myoclonic measles encephalitis that might become a new AIDS defining diagnosis and the clinical significance of HBV presence and compartmentalisation in CSF.

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MOAB0403

Effect of baseline immunological condition, virological response and duration of HAART on growth in HIV-infected adolescents

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Background: HIV infection is known to impact negatively on children's growth. Limited data exists on long-term growth outcomes of HIV-infected adolescents receiving HAART in sub-Saharan Africa. We aim to determine the correlation of baseline CD4, virological response and treatment duration with improved growth.

Methods: A retrospective cross-sectional analysis was conducted at the Perinatal HIV Research Unit in Soweto, South Africa, and included HAART-recipients aged 11-19 years at time of review. Growth was defined as the difference between gender adjusted weight-for-age and height-for-age z-score between most recent visit and baseline. We categorized baseline CD4 count as above and below 200cells/ml, and most recent VL as above and below 400 c/ml. Chi-square contingency table analysis was performed to determine the existence of an association between growth and duration of treatment, baseline CD4, age at baseline and most recent VL. Where an association existed, a univariate analysis was performed to determine the predictor of growth. The analysis was done at a 5% significance level.

Results: We identified 107 adolescents (53% female). Median age at HAART initiation and at time of review was 8.6 (IQR:6.07,11.4) and 14.75 (IQR:11.49,16.47) years respectively. Median duration of HAART use was 8.1 years (IQR:2.4, 9.1). Fifty-nine percent of adolescents had initiated HAART with CD4 count >200cells/ml, median baseline CD4 = 246cells/ml (IQR:107, 475). At most recent visit, 84% had viral loads <400c/ml. Of the four parameters (treatment duration, baseline age and CD4, and most recent viral load), only baseline CD4 count showed significant association with growth in height. Children with baseline CD4 >200cells/ml and those with having improved height compared to those with baseline CD4 <200cells/ml (p=0.019, CI:1.18, 6.2).

Conclusions: To optimize growth outcomes into adolescence, we recommend HAART at baseline CD4 count >200 cells/ml for children >5 years old.

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Background: Antiretroviral therapy (ART) in HIV-infected children is associated with metabolic complications including dyslipidemia and disturbed glucose homeostasis.

Methods: HIV-infected children and adolescents were recruited to an active surveillance cohort from 4 sites in Italy, Belgium, and Poland. We present baseline data on prevalence of, and risk factors, metabolic abnormality (MA), defined as ≥1 of: hypercholesterolemia (HC), hypertriglyceridemia (HT), both identified according to gender/age/determined thresholds, and impaired glucose tolerance.

Results: Among 468 participants (51% female), median age was 13.5 years (IQR 9.9–17.0) with 129 (28%) at Tanner puberty stage (TAN) I and 160 (34%) at stage V. Most subjects (320, 68%) were white and 104 (22%) were black African origin. Most (445, 95%) had ART for a median 8.8 years, with 259 (57%) currently taking protease inhibitors (PI). Fat redistribution was present in 201 children (42%). MA was present in 129 (28%) subjects: 21 (5%) had HC-only, 75 (16%) had HT-only, 4 had glucose intolerance (GI) only, 28 (6%) had both HC and HT, and one had combined GI, HC and HT. In unadjusted analyses, the following factors were associated, in these outcomes: current PI use (MA, HC, HT), white ethnicity (MA, HT), advanced CDC disease stage (MA), past severe immunosuppression (HC), current undetectable viral load (< 200 copies/ml) (HC), female gender (MA), current NNRTI use (MA), past severe immunosuppression (HC), current undetectable viral load (< 200 copies/ml) (HC), female gender (MA), and country of residence (MA, HT, HC). In adjusted analyses, current PI use was significantly associated with MA, HC and HT (respective ORs [95% CI], 1.94 [1.19-3.16], 2.20 [1.39-3.50], 1.85 [1.16-2.96]). Defining MA, HT, as well as reduced likelihood of HC (p< 0.05).

Conclusions: Over one quarter of subjects had MA, with HT the most common manifestation. Current PI use was consistently associated with increased risk of MA. The reduced risk of HC associated with detectable VL probably reflects poorer adherence to ART.

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MOA0404
Risk factors for metabolic abnormality in a European cohort of HIV-infected children and adolescents

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Background: Predictors of cardiac dysfunction among children and adolescents perinatally-infected with HIV-1

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Background: Previous studies of cardiomyopathy among HIV-infected children conducted prior to highly active antiretroviral therapy (HAART) and focused on echocardiographic evidence of mild left ventricular dysfunction. To the best of our knowledge the impact of MA on the incidence of clinical cardiac dysfunction among perinatally HIV-infected children is not known.

Methods: 709 perinatally HIV-infected children enrolled in a US-based multicenter prospective cohort study were followed for cardiac dysfunction, defined as an incident diagnosis of cardiomyopathy or initiation of digoxin or dobutamine, between 1993-2007. Children with prevalent cardiac dysfunction at entry were excluded, as were children with diabetes or those who had undergone cardiotoxic chemotherapy. Cox models were used to estimate the time-dependent effect of MA and other predictors of cardiac dysfunction. Cox models were also used to predict the discordance of cardiac dysfunction specifically among HAART initiators.

Results: By the end of follow-up there were 102 cases of cardiac dysfunction with an incidence rate of 5.7 cases per 100 person-years. The median age at diagnosis was 9.5 years. In multivariable analyses, birth prior to 1990, higher baseline, low CD4% at baseline, and Zidovudine (ddC) use were associated with an increased risk of cardiac dysfunction. Use of HAART regimens however was associated with a 60% decrease (HR: 0.40, 95% CI: 0.3, 0.7) in the incidence of cardiac dysfunction compared to use of non-HAART regimens. Among HAART initiators, older age at HAART initiation, CD4< 15% at the time of HIV microbiologic diagnosis, and past severe immunosuppression were associated with an increased risk of cardiac dysfunction.

Conclusions: While the use of HAART is highly effective in reducing the incidence of cardiac dysfunction among HIV-infected children, older age at HAART initiation, poor immune status, and prior use of ddC are important in the risk of cardiac dysfunction in the HAART era.

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MOA0405
New paradigm for positive prevention: "Test and treat" for and treating HIV has lowered transmission rate in Denmark in spite of increased unsafe sex among MSM

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Background: In Denmark HIV-testing is encouraged among men who have sex with men (MSM). More than 80% of HIV-positive MSM are treated with antiretrovirals (ART), 86% of these having immunoaffectably low viral load. National HIV-surveillance and behavioural studies are used to monitor trends in sexual behaviour and HIV-transmission.

Methods: Stable annual numbers of MSM notified with HIV are used as proxy for newly infected and used to calculate number of MSM living with HIV and HIV-transmission-rates. Proportions of HIV-positive respondents in the MSM Sex-Life Surveys reporting unprotected anal intercourse (UIAI) and unsafe sex (US, defined as UAI with non-positive partners) are used to estimate trends in sexual-risk-behaviour.

Results: Despite increasing numbers of MSM living with HIV, numbers of newly infected MSM remain stable, indicating a decline in transmission-rates, figure 1. This decline can not be ascribed to safer sex-practices among HIV-positive MSM, as both UIAI and US are increasing (p< 0.001), figure 2.

(HIV transmission rate among MSM in Denmark)
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In a group of 1027 women was recruited from red-light-areas in Kampala, Uganda.

Objective: A cohort of 1027 women was recruited from red-light-areas in Kampala, Uganda.

Method: All women were tested for HIV by rapid point-of-care test. Women with CD4-counts < 250 cells/µl and only 35 of them were already accompanied to ARV provision centres in the area.

Conclusion: A new prevention paradigm is needed that takes this into account.

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MOAC0104
Uptake of antiretrovirals in a cohort of women involved in high risk sexual behaviour in Kampala, Uganda

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Background: There is growing evidence that antiretroviral therapy (ART) may reduce the risk of sexual transmission of HIV. Many studies from Sub-Saharan Africa have documented high prevalence of HIV among female commercial sex workers. However, few data exist on the uptake of ART in this population group.

Objective: To determine uptake of ART among eligible HIV infected female commercial sex workers in Kampala, Uganda.

Method: A cohort of 1027 women was recruited from red-light-areas in Kampala between April 2008 and May 2009. All are followed up monthly in a research and care clinic. At each visit, women are offered HIV testing and counseling. All HIV positive women are offered Cotrimoxazole prophylaxis and ARV naïve women are assessed for ART eligibility with CD4 count determination. Women with CD4 counts < 250 cells/µl are offered pre-ART initiation counseling, baseline hematology and tests of liver and kidney function, and accompanied to ARV provision centres in the area.

Results: By January 2016, 467 (40%) women were confirmed HIV-positive (382 were HIV-positive at enrolment and 25 seroconverted during follow-up). 160 (39%) had CD4 counts < 250 cells/µl and only 35 of them were already on ART. 125 were to be referred for ART initiation but 24 did not turn up for referral. 65 (64%) have successfully initiated ART, 32 (32%) are still under treatment on ART. 125 were to be referred for ART initiation but 24 did not turn up for referral.

Conclusion: This study confirms the high prevalence of HIV infection and demonstrates that offering ART initiation counseling and active referral for treatment is a viable strategy to improve treatment uptake in this marginalized population group. The government of Uganda should scale up efforts to scale up universal access to comprehensive HIV prevention programmes, treatment, care and support including marginalised populations.

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MOAC0105
Prevention with positives: using multiple strategies to involve persons living with HIV in prevention - TASO experience, Uganda

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Issues: Efforts to prevent new HIV infections have expanded from a focus on HIV-negative individuals to include interventions targeting people who are living with HIV/AIDS. Adopting strategies to involve persons living with HIV in prevention is key to reducing new infections.

Description: The AIDS Support Organization (TASO) is a national non-governmental organization in Uganda, involved in HIV prevention, care and support. TASO started implementing HIV prevention strategies in 2007 with a focus on involving HIV-positive people in prevention. The strategies included: Counseling on prevention of HIV to positive persons this involved discussion of behavioral intervention in medical and counseling visits. - Promoting the use of provision of condoms to sexually active HIV-positive individuals. - Promoting adherence to antiretroviral drugs, by counseling, use of pillboxes, and medicine companions. - Encouraging HIV-positive persons to disclose HIV status to sex partners either by self or counselor mediated during home visits or at the nearest opportunity. - Home based HIV counseling and testing target-
Seroepidemiological research of HIV, hepatitis B, C, syphilis and behavioural risk factors among most-at-risk groups in Azerbaijan

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Background: In 2007-2008, the Republican AIDS Center (RAC) of the Minist ry of Health (MOH) implemented a surveillance project on “prevalence of HIV infection and behavioural risk factors among certain vulnerable population groups in the Republic of Azerbaijan.” The project builds on previous surveys conducted in Azerbaijan in 2003 under a WHO Regional Office for Europe initiative.

Methods: Methods were based on recommendations for conducting sentinel bio-behavioural surveys: snowball, time-place and simple random sampling. Seroepidemiological data was collected from 2600 people in seven areas of the country: 1000 injecting drug users (IDUs) in Baku, Gandja, Hajkabul, Lenkoran, Masali, Shirvan, and Sumqait; 300 female sex workers (FSWs) in Baku, Gandja and Sumqait; 10 men who have sex with men (MSM) in Baku; 200 street children (SC) in Baku; 1000 prisoners in penal institutions in Azerbaijan (2.5%).

Results: IDUs: Prevalence of HIV infection: Baku (7.5%), Gandja (1.3%), Hajkabul (33.0%), Lenkoran (9.3%), Masali (5.3%), Shirvan (21.0%) and Sumqait (6.7%). Highest prevalence of hepatitis C virus (HCV) was in Hajkabul, Lenkoran and Baku. SW: HIV antibodies were detected only in Baku (2.5%). The highest prevalence of syphilis was in Gandja (22.0%) followed by Sumqait and Baku.

Conclusions: Data on prevalence of HIV confirm that the epidemic is at an early stage. The project results will help to develop targeted prevention programmes in Azerbaijan.

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MOAC0204 National roll-out of database for monitoring HIV prevention programmes among civil society organizations in Ukraine

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Issues: Eastern Europe has limited experience in analysis and use of data from HIV prevention programmes. The advantages of databases - standardization of data collection, management, and use of data for decision-making and programme improvement - are frequently outweighed by inadequate resources for database development and use, and limited skills and incentives for programme managers to use data.

Description: Since 2004, the International HIV/AIDS Alliance in Ukraine developed “SyrEx”, a database for the collection and analysis of needs of organizations implementing prevention programmes for most-at-risk populations. SyrEx enables client registration, tracking of records and generation of reports, including: coverage of programmes, disaggregated by sex, age, risk group, geographical area; frequency of service access by clients, types and quantity of services. As of early 2009, 100 civil society organizations in all regions of Ukraine are using SyrEx as the database for monitoring their prevention programmes.

Lessons learned: Civil society organizations using the SyrEx database are able to manage and use data from their prevention programmes for purposes including: (i) real-time reporting to donors; (ii) guiding the scale-up of services and attraction of additional resources; (iii) use data in managing services to meet changing clients needs; (iv) detailed analysis of scope and scale of coverage of prevention programmes; (v) percentage of injecting drug users regularly reached by harm reduction programmes - essential for triangulation with integrated behavioural and epide-miological data on the current state of the response to the epidemic.

Next steps: Support free distribution and use of the SyrEx database among all national partners to ensure systematic collection of data that can be used to guide real-time changes in implementation of national HIV prevention programmes.

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MOAC0205 Tailored harm reduction approaches bring healthcare and social support to women who use drugs in Georgia

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Issues: According to estimates, about 8,000 women in Georgia inject drugs, comprising 20% of the total population of problematic drug users. The share of female clients among drug treatment, however, does not exceed 1% in methadone programs; women-centered drug treatment services do not exist. Drug using women’s access to HIV and general healthcare services is often hindered because of social isolation, domestic abuse, and stigma.

Description: In 2008, two harm reduction sites, in the cities of Gori and Zugdidi, launched pilot programs aiming at meeting the needs of women who use drugs. The programs are focused on attracting highly vulnerable and isolated women who are the major challenge faced by the projects. It was addressed through provision of safe daytime space and walk-in hours only for women, anonymous hotline, and promotion of the programs by local TV and radio stations. Both sites offered access to on-site HIV and hepatitis counseling and testing, free-of-charge services of gynecologists, STI doctors, pediatricians, as well as crisis counseling and peer support to build women’s self-confidence. As a result, by the end of the first year, the number of clients has increased by six-fold resulting in 10 pregnant women in both projects; 10 pregnant women received timely referrals to PMTCT services and antenatal care.

Lessons learned: In traditional societies, harm reduction programs become attractive for women if they assure safety and offer not only healthcare, but also psychological support. Relying on male clients of harm reduction programs to bring in their women partners proved unsuccessful for men’s fear of losing control over their partner and being exposed to public contempt.

Next steps: In the future, gender-centered harm reduction programs will strengthen links to women’s rights groups and prioritize making shelters for victims of domestic violence available for women who use drugs.

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MOAC0206 Reasons for treatment discontinuation during first year of antiretroviral therapy (ART): analysis of 2007-2008 data from 12 Eastern European countries

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Background: Effective antiretroviral therapy (ART) requires life-long therapy. Retaining people living with HIV on ART, especially during the first year after initiation can be challenging. Analysis of reasons for treatment discontinuation is therefore important for improving patient care and increasing adherence.

Methods: WHO is committed to monitoring the health sector response to HIV/AIDS through the global WHO/UNICEF/UNAIDS Universal Access reporting process. In addition to the global indicators, WHO Regional Office for Europe has developed several additional indicators for regional monitoring and analysis of the health sector response. “Reasons for discontinuing HAART within the first 12 months among all patients” is one of them. Average data for 2007-2008 reported by 12 eastern European countries of former Soviet Union were analyzed (no data from Estonia, the Russian Federation and Turkmenistan).

Results: An average number of adults and children (3181) initiated ART in 2007 and 2008 and were expected to achieve 12-month outcomes within the reporting period. Of them, 21% (671) stopped treatment. The reasons for ART discontinuation were: (i) clinical decision, toxicity or unwillingness to continue (30%); (ii) lost to follow-up (11%); (iii) death (38%); (iv) unknown/other reasons (21%).

Death is the main reason for treatment drop out, indicative of high levels of late presentation. The relatively low proportion lost to follow up could indicate good patient monitoring. The 30% treatment drop-out due to clinical decision, toxicity or unwillingness to continue together with 21% of unknown/other reasons is possibly indicative of inadequate treatment preparedness, poor counselling, clinical decision to discontinue treatment because of illicit drug use by patients, and insufficient clinical management of treatment side effects.

Conclusions: Eastern European countries should continue to monitor closely the outcomes of the first year of ART to address the relatively high levels of ART discontinuation within the first year of treatment.

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MOAC0301 Increased condom use and decreased HIV/STI prevalence among female sex workers following a targeted intervention program in Karnataka, South India

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Background: We assessed the impact of a large-scale, targeted HIV preven tion programme among female sex workers (FSWs) in Karnataka state, south India. From the project, we learned...

Methods: In the context of an HIV prevention program involving 18 districts, funded by the Ayahana Initiative of the Bill & Melinda Gates Foundation, we conducted initial and follow-up behavioral and biological assessments involving random samples of FSWs in five districts. Surveys were at 7-19 months following program commencement, and again 26-37 months later.

Results: 2,312 FSWs participated in initial surveys, and 2,400 at follow-up. At follow-up, >85% of FSWs reported contact by a peer educator and having visited a project STI clinic. Compared with baseline, there were reductions in...
the prevalence of HIV (19.6% vs 16.4%, adjusted odds ratio (AOR) 0.81, 95% CI 0.67-0.99, p=0.04); high-titre syphilis (5.9% vs. 3.4%, ADR 0.53, 95% CI 0.37-0.77, p=0.001); and chlamydia and/or gonorrhoea (8.9% vs. 7.0%, ADR 0.72, 95% CI 0.54-0.94, p=0.020). Trichomoniasis, which was as-

Results: 2,966 sex workers were ever reached during the project, and 36% of 
those were regular participants (>4 project-related contacts). At endline, 
compared to endline, at pre-endline. Low interest was shown by sex workers 
for occasional sex workers with commercial and/or non-commercial partners 
was more likely to use condoms than their last partner respondents 
from control sites (OR=1.09, 95% CI 0.88-1.35, p=0.49). Conclusion: Saliva 
who participated in the control intervention were more likely to use condom 
with their last partner compared to the intervention group (p<0.001).

Conclusions: Behavior change to reduce HIV transmission was achieved 
and utilized widely by sex workers, including among non-participating sex workers in the 
project sites. Funds are needed for maintenance and scale-up of these efforts 
have a lasting effect on the HIV epidemic. 

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MOAC0304

An amphetamine-like stimulant use increase 
HIV risk among young women engaged in sex work in Phnom Penh, Cambodia

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Background: We examine amphetamine-like stimulant (ATS) use, which 
has increased in Cambodia and emerged as a potential significant problem 
among sex workers (SWs), who are at highest risk of HIV infection.

Methods: A one-year prospective study (June 2007-2008) among 160 young 
women (15-29 years) engaged in SW in different venues, including brothels, 
entertainment establishments (EEs), and on a freelance basis in streets, parks 
and private apartments. In quarterly visits, sociodemographic, sexual risk 
behavior; and reduction of stigma and discrimination. Services were provided 
regression models with repeated measures were used to assess associations 
between ATS use and sexual risk behaviors and incident STI.

Results: The prevalence of recent ATS use was higher among women 
working in brothels (34.8%) or as freelance SWs (35.6%) compared to 
working in EEs (17.7%). ATS use was associated with prevalent 
infection. In multivariate regression models, controlling for HIV infection, 
age, and other covariates, ATS use was independently associated with: (1) a 
higher mean number of sexual partners among SWs in EEs (RR 2.51; 95% CI: 
1.95-3.20) and brothels (RR 1.92; 95% CI: 1.35-2.72); and (2) inconsistent 
condom use among SWs working in multiple venues (RR 4.95; 95% CI: 1.23- 
29.81); and (3) incident STI among SWs working in all types of venues. 
(OR 1.98; 95% CI: 1.10-22.58).

Conclusions: ATS use is widespread among young SWs in Phnom Penh and 
significantly associated with multiple-risk factors for HIV. This study is the 
first to prospectively assess ATS use and HIV risk in Cambodia and among the 
first to examine risk in women. Our results underscore the urgency of 
addressing drug use among these young women and integrating new prevention 
approaches into HIV/STI programs.

MOAC0305

Intravaginal practices in a cohort of women 
at high risk in North-West Tanzania: baseline associations with HIV

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Background: A range of highly prevalent female behaviours termed intravaginal 
practices (IVP) are potential risk factors for HIV transmission. We will 
describe the prevalence of IVP at screening in a cohort of women at high risk 
for HIV recruited to a microbicide feasibility study. During the screening visit, 
each woman was tested for HIV infection and had a face-to-face interview which 
included questions about their IVP use in the past three months.

Methods: Of the 1785 women screened, 1,590 (89%) reported 
cleansing inside the vagina in the past three months, of which, 1,282 (81%) used 
soluble or soap or soapy water. Overall, 412 (23%) participants reported 
inserting a substance inside the vagina: of which 104 (25%) inserted 
substances: 29 (7%) inserted condom removal, 94 (21%) inserted 
screwed, and 93 (23%) inserted petroleum-based gels. Intravaginal cleansing was strongly associated with HIV in both the un-
adjusted (OR 1.77, 95% CI 1.16-2.71) and adjusted analyses (OR 1.56, 
95% CI 1.01-2.30). Using savanna products was marginally 
significantly associated with HIV than using water alone (OR 1.79, 95% CI 1.17-2.75). 
Vaginal insertion was associated with HIV in the unadjusted analysis 
(OR 1.39, 95% CI 1.01-1.92), but not in the adjusted (OR 1.28, 95% CI 
98.1-1.69), and no individual insertion substance was associated with HIV.

Conclusions: In this study, intravaginal cleansing using savanna products 
was strongly associated with prevalent HIV infection. With a high prevalence 
of intravaginal cleansing, even small increases in HIV risk may be important 
for transmission. Improvements in sexual health education and products 
are required to combat a problem previously seen as uncommon. Subsequent analyses will investigate association between 
incident HIV and vaginal infection.

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MOAC04 Drug Injection: Responding to “New” and “Old” HIV Epidemics

MOAC0401 Correlates of HIV infection among injection drug users in Unguja, Zanzibar, 2007

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Background: Although the role of drug injection in the transmission of HIV is widely recognized, data in sub-Saharan Africa are limited. In Zanzibar, HIV prevalence is 0.5% among males and 0.7% among females; however, a major concern is that injection drug use will fuel the epidemic. Injection drug users (IDUs) in Zanzibar are increasing, and increased HIV transmission and sexual practices and can transmit HIV to the general population. Using a probability sampling survey—the first to be used with IDUs in sub-Saharan Africa—we assessed HIV seroconversion and HIV risk factors in Unguja, Zanzibar.

Methods: During August-September 2007, IDUs were recruited by using respondent-driven sampling (RDS), a probability-based, peer-recruitment sampling method. Participants completed behavioral questionnaires and were tested for HIV, hepatitis C virus (HCV), and syphilis. A mandible C virus (HCV) and seroconversion were assessed. Proportion estimates and multiple logistic regression were adjusted for RDS design.

Results: Of 499 IDUs, 96.8% were male, median age was 31 years (range: 15-66 years), and 34.6% had 17 years of education. HIV seroprevalence was 16.3% (95% confidence interval [CI]=11.6-21.8), and HCV seroconversion was 25.7% (CI=20.2-31.9). After adjustment for age and sex, HIV infection was independently associated with lower education level (adjusted odds ratio [AOR]=2.2, CI=1.1-4.4), having never used coked (AOR=2.5, CI=1.3-4.8), HCV infection (AOR=3.1, CI=1.6-6.2), and symptoms of sexually transmitted infections in the past 6 months (AOR=2.1, CI=1.1-4.2).

Conclusions: HIV seroconversion among IDUs in Unguja is high. High-risk drug injection and sexual practices will probably continue the spread of HIV among IDUs and in the community. Comprehensive HIV prevention programs for IDUs should be developed.

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MOAC0402 Outcomes of large-scale syringe exchange in Tallinn, Estonia

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Background: Assess outcomes of expanded syringe exchange in Tallinn, Estonia. There is relatively little research other than pilot studies on syringe exchange in developing/transitional countries. Estonia has experienced a concentrated HIV epidemic among IDUs, with the highest HIV incidence in Eastern Europe. There are an estimated 10,000 IDUs in Tallinn, the capital city of Estonia.

Methods: Syringe exchange implementation was monitored with data from the Estonian National Institute for Health Development. Three re- spondent driven sampling (RDS) interview surveys with biological samples for HIV testing were conducted in Tallinn, N = 350 IDUs in 2005, N = 350 IDUs in 2007, N = 327 IDUs in 2009. HIV incidence among new injectors was estimated (persons injecting or < = 5 years) by assuming (1) all new injectors were HIV seronegative at the midpoint between first injection and time of interview.

Results: SEP expanded from 230,000 syringes exchanged in 2005 to 440,000 in 2007 to 770,000 in 2009. In all three surveys, IDUs were predominantly male (80%), ethnic Russians (80%), and young adults (mean ages 24 to 27 years). HIV prevalence among all subjects stabilized at slightly over 50% (54% in 2005, 55% in 2007, 51% in 2009). Estimated HIV incidence (based on new injectors) decreased significantly in 2009, from 18/100 person-years in 2005 and 21/100 person-years in 2007 to 6/100 person-years in 2009 (p < .01).

Conclusions: Large-scale syringe exchange appears to be quite effective in transitional countries, though further reductions in transmission among IDUs are still required in Estonia. Coverage of 80 or more syringes per IDU per year are needed before significant reductions in HIV incidence occur.

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MOAC0403 Evaluating the cost-effectiveness of needle and syringe programs in Australia

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Background: Needle and syringe programs (NSPs) distribute sterile injecting equipment in order to reduce risk of transmission of HIV among injecting drug users (IDUs). This project aimed to estimate the epidemiological impact and cost-effectiveness of NSPs in Australia over the last 10 years.

Methods: A mathematical epidemic model was developed to simulate HIV and HCV transmission among IDUs in Australia. The model was informed by detailed biological data, Australian-specific behavioral data, and the number of injecting equipment units distributed by NSPs each year. The model simulated epidemic trends with and without NSPs. An economic analysis used the epidemic model results and detailed data on costs. Discounting was applied at 3% and 5%.

Results: The investment of ~A$243 million and annual distribution of ~30 million needles and syringes has directly averted an estimated 32,050 new HIV infections and 96,667 new HCV infections. The cumulative benefits of NSPs are further pronounced if long-term projections are considered. The investment has yielded healthcare costs saved of ~A$1.2 billion, ~A$400 million, and net financial cost-savings of ~A$1.03 billion.

Conclusions: For every one dollar invested in NSPs, more than four dollars were returned (additional to the investment) in healthcare cost-savings in the short-term (ten years) if only direct costs are included; greater returns are expected over longer time horizons. The majority of the cost savings were found to be associated with HIV-related outcomes. However, when only HIV-related outcomes were considered in the analysis, the cost ~A$4,500 per DALY gained associated with NSPs is very cost-effective compared to other common public health interventions.

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MOAC0404 Drug users’ perceptions of HIV prevention programs in North West Russia

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Background: The growing HIV epidemic in Russia is driven largely by people who use drugs. Little is known, however, about how people believe that NGOs and the state are addressed to prevention messages. One of the purposes of the study was to assess if people believe that NGOs and the state are addressed to prevention messages.

Methods: 22 semi-structured interviews were collected in 3 regions of North West Russia: two with high prevalence of HIV among drug users (St. Petersburg and Leningrad region) and one with low prevalence (Arkhangelsk region).

Results: No regional differences transpired in our informants’ attitudes towards and with experience with HIV prevention efforts - all of them had encoun- tered information campaigns in the media but few told that they had read or really paid attention to them. Apart from information campaigns no one thought that there were governmental prevention measures. While having no or very little prior contact with harm reduction services many informants underscored the necessity of special ‘harm reduction’ programs for IDUs on the large scale. They said that NGOs would do a better job than the state, provided they had the funding, as they are ‘really working’ with risks groups. Whereas all informants trusted HIV-prevention recommendations from NGOs, most of them had relied to fol- low them and continued high-risk practices (such as needle-sharing). Apathy and fatalism were evident in the narratives of many informants when they told about their drug use; for them drug use meant that there was no point in taking care of their health. Needle-sharing was also associated with drug withdrawal and absence of clean syringes.

Conclusions: HIV prevention campaigns targeted at the general popula- tion are insufficiently effective for IDUs. Rapid expansion of harm reduction programs specially tailored for IDUs’ needs is required. Training programs and outreach work with IDUs combatting their fatalistic attitude towards their health are needed.

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MOAC0405 Crystal methamphetamine injection predicts slower HIV RNA suppression among injection drug users

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Background: Increasing crystal methamphetamine (CM) use worldwide poses a significant threat to HIV prevention and treatment strategies. CM has been linked to sexual and parenteral risk behaviours and increased likelihood of HIV seroconversion, as well as poor adherence to antiretroviral therapy. We examined the impact of CM injection on HIV RNA suppression among a prospective cohort of HIV-positive injection drug users (IDUs) initiating anti- retroviral therapy.

Methods: We enrolled HIV-positive IDUs into a community- recruiting prospec- tive cohort study. We modeled factors associated with HIV RNA suppression using Cox regression to determine factors independently associated with viral load suppression.

Results: Between September 1996 and April 2008, 384 (54.2%) antiretrov-
Looking to the future: South African men and women balancing disease risk and relationship risk (Project Accept/HPTN043)

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Background: Recent research examining negotiations of HIV risk in heterosexual relationships has drawn attention to the indirect strategies men and women use to negotiate sensitive issues with their partners. This study examines the strategies men and women in South Africa use to engage their partners in discussions of HIV and risk factors in their relationships.

Methods: We examine in-depth qualitative interviews that were part of a larger multi-site, randomized controlled HIV prevention trial, Project Accept (HPTN 043). In this paper we focus on data collected in two South African sites, Vuwella, a rural community, and urban communities in and around Soweto, Johannesburg.

Results: In our two South African sites, the strategies men and women use to discuss HIV with their partners entailed balancing the risks of infection while managing the challenges of maintaining a relationship in which the greater majority of couples are not married and most are not cohabiting.

Conclusions: Research in South Africa should attend to men’s and women’s desires to be sexually active and to raise children. Understanding prevention and treatment programs that can capitalize on concerns regarding children and the future of the family to engage men and women in discussing mutually acceptable strategies for preventing infection and ensuring safe conception. Presenting author email: ivanrooyen@hsrc.ac.za

How taking care of oneself could help long term injection drug users remain uninfected with HIV and HCV

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Background: Various studies show that though prevalence of HIV and especially HCV is high among injection drug users in New York, about 30% remain uninfected with either virus despite long-term drug use. The Staying Safe study sought to formulate grounded hypotheses about how they managed to do so.

Methods: Using a “Positive deviance control-case life history” design to study how New York City IDUs (who had injected drugs for 8 to 15 years) remained uninfected with HIV and HCV, we compared qualitative data on the life histories of 35 IDUs. 21 participants were negative for both viruses, 11 were negative for HIV although positive for HCV, and 3 were double-positive (for both HIV and HCV).

Results: Most double-negative informants “took care of themselves,” both as physically healthy persons and as social selves by successfully integrating and performing various drug using and non-drug using roles. They not only managed to avoid high-risk practices but also took pride in maintaining their family and worker roles (in legal or illegal economy). In addition, for maintaining a respectable self, double-negative informants do ‘boundary work’ between themselves and ‘reckless junkies.’ Stable income strategies played a pivotal role in maintaining their lives by allowing subjects to perform various drug using and non-drug using roles successfully. However, when these subjects lose control over their drug consumption they skillfully resorted to various institutions, such as detoxes and methadone programs, to regain stability.

Conclusions: Consideration of drug users only in terms of their risk practices is insufficient for understanding how they remained uninfected in the long run. Successfully playing roles such as ‘worker,’ ‘relative,’ and ‘client’ seems to facilitate their playing the ‘careful drug user’ role and thus reducing their risk trajectories. Analyzing biographies as complex life-trajectories involving non-drug using aspects is indispensable for comprehending long-term risk trajectories.

MOAD0104
Contesting diverse widow inheritance customs in Uganda, Kenya and Tanzania

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Background: Widow inheritance is a cultural practice often labelled harmful because it enhances possibilities of HIV (re)infection to widows and their inheritors. In some contexts the rituals necessitate consumption of unprotected sex in order to purify the widow from contagion and curing the entire community. This study explored mechanisms for negotiating the cultural mandate to have sex with widows during widow inheritance rituals.

Methods: Fieldwork was conducted in rural and urban areas in Uganda, Tanzania and Kenya. Ethnic groups with different opportunities for contesting widow inheritance and cleansing were sampled. Snow-ball, purposive and theoretical sampling techniques were combined. A sexual and reproductive health and rights (SRHR) framework informed the study. Data collection methods trian-gulated ethnographic participant observation, individual in-depth interviews, focus group discussions, and policy reviews. Data were recorded on audio cassette, transcribed verbatim and translated into English. Thematic content analysis and discourse analysis were supported by Atlas.ti software.

Results: While widow inheritance was originally established as a cultural institution to support widows and orphans through the threat of poverty and disinheritance of the extended-family system reportedly negated this social benefit. Instead, widow inheritance was variously reconstructed into a patriarchal mechanism subjugating widows, wives and their off-spring. Diverse sexual rights of widows and inheritance inheritors were often neglected, denied and violated. These widows neither participated in the processes, nor consented about the course of their sexual-bodies. They lacked voice. However, using HIV/AIDS-based arguments some widows were contesting the practice through legal redress, mounting protracted resistance, partnering with other widows in similar circumstances, advocacy, migrating, and appealing to religion.

Conclusions: East African widows draw on diverse strategies to challenge widow inheritance which could expose them to HIV (re)infection. These strategies should be enhanced, supported and scaled-up in order to combat increased vulnerabilities of widows, wives and widow-inheritors’/cousins.

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MOAD0105
‘Get them while they’re young!’: newly diagnosed YMSM’s perspective on HIV prevention

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Background: Thirty years into the epidemic, young men who have sex with men (YMSM) continue to be the largest at-risk group for HIV/AIDS in the United States. Despite not knowing a world without HIV, many YMSM appear immune to current HIV prevention messages, resulting in persistently high rates of HIV in this cohort.

Methods: Using purposive sampling, face-to-face confidential interviews were conducted with ten 18 to 24 year-old YMSM who had received an HIV diagnosis within the last twelve months. During the interview, participants discussed their risks for becoming infected and offered their opinion on developing effective HIV prevention strategies that target their peers. Interviews were audio-taped and transcribed verbatim. Content analysis was used to examine the data. Transcripts were independently reviewed by two researchers, themes identified, and consensus on themes obtained.

Results: The data revealed four major themes: personal risk, education, technology, and role modeling. Despite engaging in high-risk behaviors, most participants did not believe they would become infected. Online pornography emerged as a de facto manual for educating these participants about gay sex. They recommended incorporating HIV prevention messages into technology platforms used by young people today. These young men realized at an early age that they were attracted to men and suggested that the use of gay role models in prevention programs would be beneficial in the development of young gay men’s sexual identity and subsequent behaviors.

Conclusions: According to the newly diagnosed YMSM in this study, current HIV policies and prevention strategies must be overhauled to meet the needs of their peers. Existing interventions target YMSM too late and resistance to change occurs because barriers that put young at-risk have already become integral to their sexual experience. Effective interventions must match the sophistication level of today’s gay youth and formulation of age-specific strategies is imperative.

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MOAD0106
Using Buddhism and universal knowledge to reduce HIV transmission in a Tai Lue ethnic community in China

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Issues: Officials of Sipsongbana, or Xishuangbanna Dai Autonomous Prefecture, an ethnic region of China’s Yunnan Province, estimate over 1,400 residents are HIV-positive, the true number is probably higher. While the government yearly strengthens AIDS prevention and control work, it has found it difficult to reach ethnic minorities. Xishuangbanna has 30 million Tai Lue ethnic people who face difficulties obtaining basic AIDS information.

Description: The Sangha Metta Project brings together Buddhist monks and community volunteers to meet the needs of the Tai Lue community. The monks provide instruction in morality, ethics and meditation. They converse fora to identify needs of PLHIV and create a platform for exchange. They share meals with PLHIV, conduct home visits, and provide small living allowances to help PLHIV meet basic needs. PLHIV share their own experiences to help others understand the impact of the epidemic on individuals, families, society, and the nation. Community volunteers teach members of the community basic HIV transmission and safe sex knowledge. They provide counseling to young people and stress the importance of HIV counseling and testing.

Lessons learned: Ethnic minorities are highly vulnerable to HIV in China, because of the risk of trafficking, drug use, and their remoteness from state services. The Sangha Metta House is one of the few faith-based HIV/AIDS initiatives in China, and one of the few community-driven HIV prevention programs in an ethnic minority community. The program demonstrates that such community-religious-government partnerships are successful in reaching hard-to-reach ethnic groups.

Next steps: Multiple factors, including remoteness from government services, language barriers, cross-border mobility, and vulnerability to trafficking and drug use, combine to make China’s ethnic minorities highly vulnerable to HIV/AIDS. The Sangha Metta Project is a community-led faith-based initiative which has successfully mobilized a hard-to-reach community. This is a model that other ethnic minority regions in China could consider studying.

MOAD0202
Protective processes and resilience in Rwandan children and families affected by HIV/AIDS

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Background: The healthy development of children is threatened by menaces such as war and HIV/AIDS, and greater knowledge is needed about protective processes that contribute to positive development despite risk (resilience). Rwanda presents an important example of compounded adversity where many families are simultaneously affected by the legacy of the genocide, severe material deprivation, and HIV/AIDS. The aim of this research was to identify and examine strengths and sources of resilience in individuals and families at risk for psychosocial difficulties due to HIV/AIDS.

Methods: We used maximum variation sampling to complete free-listing exercises (N=21), key informant interviews (N=68) and focus groups (N=9) among adults and children (ages 10-17) in Southern Kayonza District, Rwanda. We identified local Kinyarwanda terms for protective resources, their indicators, and local perceptions of how to foster these strengths in children, families, and communities. These data were compared to existing theory on resilience and protective resources in other cultures.

Results: We identified five forms of resources comprising individual, family, and collective/community strengths: Kigwanga (perseverance/coping); Kwirapira ikizere (self-esteem/self-confidence); Kwizana (family connectedness); Ubirese bwiza (good parenting) and Kubaba haftu / kubitho (social support).

Conclusions: There is evidence of important protective resources among children and families affected by HIV/AIDS in Rwanda that can be leveraged by intervention programs. These findings are being used to develop measures of protective resources and to design preventative interventions that build on local strengths.

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MOAD0203
Resilience among gay/bisexual male youth living with HIV: implications for intervention

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Background: Increasing numbers of gay/bisexual male youth are becoming infected with HIV in the U.S. and worldwide. Although the vast majority of research on this population has focused on risk-related factors, information regarding how these youth have coped with their diagnosis and remained resilient is critical in order to develop interventions that promote the health and well-being of these young people. The purpose of this study was to explore resilience among HIV-positive gay/bisexual male youth.

Methods: In-depth qualitative interviews were conducted with 56 HIV-positive gay/bisexual male youth (ages 17-24) recruited from four geographic distinct clinics in the U.S. Questions elicited specific and contextual data regarding participants’ experiences, beliefs, and behaviors as young gay/bisexual men living with HIV.

Results: Qualitative data were analyzed using a phenomenological framework. Four primary thematic areas of resilience were reported by participants:

1. Engaging in health-promoting cognitive processes (evaluating life goals; gaining a sense of control through seeking knowledge; taking responsibility for health outcomes);
2. Negotiating healthy behavioral practices (increasing exercise/improving diet, decreasing drug/alcohol use, practicing safer sex);
3. Enlisting social support from others (accessing health care providers/organizations, friends/peers, family members, romantic partners/ex-partners); and
4. Empowering other gay/bisexual youth (educating youth to prevent HIV, serving as a role model for others living with HIV).

Conclusions: These data demonstrate that gay/bisexual male youth living with HIV present resilience via cross-dimensional experiences that youth affected by HIV also demonstrated significant reductions in somatic and depressive symptoms (74% to 47%; p< 0.0001), and feeling hopeless about the future (57% to 35%, p=0.01) comparing pre- to post-intervention. Youth affected by HIV also demonstrated significant reductions in somatic and depressive symptoms (Figure 1). Prevalence of poor psychosocial functioning related to symptoms among youth declined from 51% to 16% (p<0.0001).

Results: Caregivers demonstrated significant reductions in depressive symptoms, including thoughts of suicide (27% vs. 8%; p=0.0023), feeling sad (74% to 47%; p< 0.0001), and feeling hopeless about the future (57% to 35%, p=0.01) comparing pre- to post-intervention estimates. Youth affected by HIV also demonstrated significant reductions in somatic and depressive symptoms (Figure 1). Prevalence of poor psychosocial functioning related to symptoms among youth declined from 51% to 16% (p<0.0001).

Conclusions: The TALC psychosocial support program demonstrated feasibility in central Haiti, a very resource-poor setting. Preliminary results suggest that youth affected by HIV/AIDS and their caregivers have high levels of psychological distress that can be addressed through a family-centered psychosocial support group intervention with the goals of enhancing coping skills, improving social support and strengthening relationships of HIV-affected youth and their caregivers.

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MOADO0205
Entraide Positive 2007-2010 / Positive Support 2007-2010 Positive prevention peer project - the evolution of the project, the selection of the peer helpers, the organization of the help, the retention in time and experiences of the helpers and the retention in the project and in the organization of the helpers
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Description: Positive Support is a community-originated initiative that targets HIV-positive men who have sex with men (MSM) and focuses on preventing sexually transmitted and blood-borne infections. Its approach relies on peer-based education and awareness efforts. The peers (called “peer helpers”) are MSM who are selected through interviews, attend on-going training and decide for themselves which education and prevention actions to take. In the fall of 2007, the Positive Support peer helpers selected three methods for achieving their goals:
1) Personalized support: When an HIV-positive MSM is experiencing difficulties related to his HIV status, he can request personal support from a peer helper. His difficulties may be associated with any biopsychosocial aspect of his life as an HIV-positive individual: medication, disclosure, side effects, isolation, etc. The peer helper agrees to enter into a support relationship to assist the individual on a time-limited basis (maximum 10 to 15 meetings) using an approach that encourages self-development.
2) Support group: The support group is designed to bring together HIV-positive MSM who are experiencing any type of difficulty or who have questions or concerns about their HIV status. In addition to reducing isolation, the group enables participants to exchange information and share their life experiences.
3) Visibility squad: This team’s goal is to provide public visibility for life-affirming models of HIV-positive MSM. Interested peer helpers develop various artistic, communicative or other strategies to achieve this goal (e.g. distribute texts, organize artistic initiatives during gay festivals, etc.). By being visible in public, life-affirming models of HIV-positive MSM, the peer helpers aim to break down the prejudice and taboos that persist about HIV and help improve the quality of life for HIV-positive individuals.

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MOADO0206
The internet and patient expertise in the context of HIV
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Background: The emergence of internet use for health has been met with concern and excitement, yet minimal qualitative research exists on its use by people living with HIV. A prominent theme in this discourse is whether internet use increases patient expertise and alters doctor-patient relations. Using an ethnomethodological approach, we explored how people living with HIV use the internet to find “medical” information affords patients’ experiences of living with HIV and patient-practitioner interactions.

Methods: Forty one HIV-positive women of Sub-Saharan African origin living in London were recruited from HIV clinical services for in-depth interviews about their use of the internet to obtain health information. The interview transcripts and field notes were subjected to thematic analysis and findings validated at two focus groups.

Results: Three themes emerged from the analysis. Firstly, there exists a mutual dependency between online and offline information. Even the most avid internet users relied on HIV physicians as their primary information source. A prominent theme in this discourse is whether internet access and the availability of HIV treatment increases it becomes valid at two focus groups.

Lessons learned: Success in effective reducing vulnerabilities for these especially vulnerable ethnic people affected by in disaster earthquake are largely attributable to innovative use of integrated socio-cultural resources combating poverty and discrimination beyond a simple public health oriented approach. Gender and children-focused indigenous strategies with the particular linking ethnic situation - traditional advocacy, empowering tribal/ethnic society to take their own initiatives in collectivestress are stressed.

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MOADO0302
Innovative cultural approach as a new frontier in reducing vulnerabilities for ethnic women and children affected by HIV in the earthquake disaster areas of Sichuan, China
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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 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 emergency and challenging settings. The need for a comprehensible 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 innovative indigenous response to epidemics and vulnerabilities for HIV/AIDS in ethnic communities in earlier stages of China. Work carried out in this study covered different stage with a coherent approach to explore innovative model for reliable response to disaster and epidemics across 3 ethnic populations of Sichuan. Stage one was conducted to assess the demands for 3450 children and 4360 current children’s female caregivers. Insights from the findings in stage one are used to tailor the evidence-based, culturally appropriate approach on the best use of integrated socio-cultural resources to facilitate the reduction of vulnerabilities. Evidences are extended used to support policy decision as following stages.

Lessons learned: Success in effective reducing vulnerabilities for these especially vulnerable ethnic people affected by in disaster earthquake are largely attributable to innovative use of integrated socio-cultural resources combating poverty and discrimination beyond a simple public health oriented approach. Gender and children-focused indigenous strategies with the particular linking ethnic situation - traditional advocacy, empowering tribal/ethnic society to take their own initiatives in collectivist stress are stressed.

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MOADO0303
Mobilizing Ethiopian idirs: capitalizing on traditional burial societies to serve the living
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Issues: Idirs are traditional Ethiopian burial societies that help member’s families bury their dead. Catholic Relief Services (CRS) has capitalized on idirs, by reaching members with HIV prevention messages that have transformed idirs into community change agents that care for and support orphans and vulnerable children (OVC).

Description: We Stop AIDS is a participatory tool designed for low-literacy populations, facilitates in-depth discussion around HIV and stimulates action. After completing WSA, 180 idirs—comprised of 5400 members—have started health promotion and social and development activities. For example, in one idir, members have created five teams for home visiting and by increasing and pooling their monthly financial contribution have provided food, clothing, shelter, and educational and medical support to 29 OVC, 4 PLHIV and 6 elderly. Groups create goals for care of OVC, conduct home visits, and contribute additional fees to support outreach activities.

Lessons learned: With an adult literacy rate in Ethiopia of 36%, WSA is ideal for mobilizing idirs. WSA stimulates discussion which leads to local problem analysis and solutions. Mobilization of the idirs has been successful because the members have built a team spirit which is captured by a participatory curriculum. In developing their action plan together, the groups work with a sense of urgency, trust building their trust and efficacy. As traditional grassroots organizations, idirs are independently generating their own income—making them sustainable and scalable.

Next steps: CRS would like to build capacity of successful idirs by implementing a monitoring and evaluation mechanism and by training idirs in income generating activities. CRS would also like to assess how they scale up by training them to share their community vision with other idirs. CRS plans to train an additional 90 facilitators of WSA who will be able to lead one idir through the participatory curriculum to the creation of a local community action plan.

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MOAD0304
An ecological approach to the implementation of a sexual education program in Brazil
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Background: Brazil has the highest cumulative HIV and sexually transmitted disease (STD) burden within South America, with sex between the ages of 15-24 (UNAIDS 2008). Although sexual education programs have been implemented in Brazil, few confront multi-faceted socio-cultural factors perpetuating the cycle of high risk sexual behaviors.

Methods: The present study is a qualitative evaluation based on an ecological approach to sexual education in Brazil. Additionally, focus groups and in-depth semi-structured interviews were conducted evaluating adolescent sexuality and HIV/AIDS, working towards understanding the protective and risk factors at individual, family, peer, school, community and socio-cultural levels contributing to adoption of healthy or risky sexual behaviors.

Results: The qualitative data which emerged suggested many adults verbalized discomfort related to sexuality. Additionally, a deeply engrained fear relating to sexual education programs seems to keep youth from obtaining crucial knowledge which could assist in making decisions about sexual health. Further, the variable gender roles adversely affected adolescent’s behaviors related to sexual decision making. Specifically, many messages emerged related to male sexual permisiveness, and female sexual prohibition. The permissiveness extended to other behaviors, creating a gender hierarchy in which the male was given unquestioned authority.

Conclusions: These results show an imminent need to address gender constructions. When societies enter into a level of inflexibility within gender, additional stereotypes emerge related to being lesbian, gay, bisexual or transgendered. Men who choose to waiver from “traditional,” gender roles are punished and/or thrown out of peer groups. The present analysis demonstrated that the data on the “inflexible male” phenomenon, for sexual expression differing from the normal “machisto,” conceptualization of masculinity. If sexual education programs are to be successful, the construction of gender roles, and men are given the opportunity to have relationships with men modeling emotional nurturing, then the rigidly within gender roles will begin to break down, confronting the patriarchal views that presently exist.

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MOAD0305
Socio-cultural Issues as barriers to HIV-infected orphan care in Southern Africa
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Background: HIV/AIDS in Africa has left many orphaned and vulnerable children. Knowledge of HIV+ orphans and the need to keep them from having to suffer in institutions is crucial and can be achieved through possible needle reuse or other mechanisms. Additionally, a deeply engrained fear relating to sexual education programs seems to keep youth from obtaining crucial knowledge which could assist in making decisions about sexual health. Further, the variable gender roles adversely affected adolescent’s behaviors related to sexual decision making. Specifically, many messages emerged related to male sexual permisiveness, and female sexual prohibition. The permissiveness extended to other behaviors, creating a gender hierarchy in which the male was given unquestioned authority.

Methods: Leaders at 10 orphan care institutions in Southern Africa agreed to participate in a structured interview. The interviews were recorded and the responses were transcribed verbatim. Using a standard qualitative research procedure based on grounded theory, three members of the research team independently reviewed the transcripts and developed broad conceptual themes. These themes were then coded, reviewed again, with the final salient themes being verified among the research team for clarification, consensus and validation.

Results: Three over-arching themes of poverty, cultural differences between outliers and the care institution, and HIV denial/stigma emerged from the interviews. Poverty has led to both local and national social ills. The culture has traditionally allowed the traditional “inflexible male” phenomenon, for sexual expression differing from the normal “machisto.”

Conclusions: While many advances have progressed in the medical care of HIV infected children, the implementation of HIV+ orphan care in Africa will need to be placed more in the hands of Africans to overcome socio-cultural issues as barriers to HIV-infected orphan care in South Africa.

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MOAD0306
When identity claims: risky processes of body modification among the male to female transgender population of Lima, Peru
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Background: Male-to-female transgender people (TGP) in Lima are the most vulnerable group to HIV/AIDS in Peru, with a prevalence of 30% and yet the least known. Issues around gender identity such as body modification need to be explored and contextualized in terms of their vulnerability to the epidemic. We present characteristics of body modification procedures among TGP that have not been previously described in public health context.

Methods: Using respondent driven sampling (RDS), 8 initial seeds generated a sample of 450 TGP from Lima in 2009. Socio-demographic characteristics, body modification procedures, among others were explored through an interview plus testing for HIV and other STIs. Estimates were adjusted for RDS sampling design.

Results: Body modification procedures were reported by 70% (95%CI: 61-76) of participants. The commonest was hormone use [83% (95%CI: 80-87)] (66% hormone infection) followed by the injection of industrial silicone, commonly known as airplane oil, in 40% (95%CI: 32-45) of the population. Most procedures were not medically supervised [71% (95%CI: 59-81)]. Hormone use was mainly indicated by a friend (67% (95%CI: 60-80)) and had no medical follow up in 95% (95%CI: 91-98) of the cases, while 41% (95%CI: 29-49) reported at least one health problem related to these procedures such as skin infections [18% (95%CI: 4-36)].

Conclusions: TGP in Lima undergo invasive medical procedures outside the health system to feminize their appearance. This reflects the desire to create a body that conforms to identity in a context of extreme exclusion which needs to be further explored. There is an urgent need to integrate these procedures into comprehensive care programs for this population, which could increase access to HIV prevention programs as other settings. More research needs to determine a potential role of these practices in HIV transmission, through possible needle reuse or other mechanisms.

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MOAE01 Impact of HIV Programs on Other Health Services and Population Health

MOAE0101
Assessment of PEPFAR’s impact on selected health system parameters in Sub-Saharan African countries
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Background: Since 2003, the President’s Emergency Plan for AIDS Relief (PEPFAR) has been one of the most ambitious initiatives to address the global HIV epidemic. To date, the impact of PEPFAR on healthcare systems remains to be characterized.

Methods: We obtained data on 12 sub-Saharan PEPFAR focus countries and compared them with 28 sub-Saharan control countries. We then collected longitudinal data (1997 to 2007) on five healthcare indicators from the Millennium Development Goals (MDG), WHO Statistical Information System (WHO-SIS) and the WORLD Bank databases: malaria-related death rate, under 5 mortality rate (USMR), TB mortality rate, meningococcal conjugate vaccine (MVC) and diphtheria-tetanus-pertussis (DTP3) infant immunization rates. We used linear mixed-effects models to compare the difference in percentage change in the outcomes between focus countries and control countries from pre-PEPFAR era (1997-2002) to during and post PEPFAR era (2004-2007).

Results: Our results demonstrate no significant difference in the change in the malaria-related death rate, TB mortality rate, MVC and DTP3 infant immunization rates between PEPFAR focus countries and control countries prior to and after PEPFAR activities. The USMR did decrease by 22.4% (p = 0.0001) in PEPFAR focus countries in comparison to that in control countries after PEPFAR’s commencements.

Conclusions: Our results suggest that PEPFAR activities were associated with a significant reduction in the number of deaths among children under 5 years old. We observed no significant difference in the number of malaria-related deaths, TB mortality rate, and the change in measles and DTP3 infant immunization rates following the implementation of PEPFAR activities. Some promising trends are apparent regarding to healthcare outcomes following implementation of PEPFAR activities based on these results. Further efforts are warranted to better characterize the impact of PEPFAR and other such programs, on overall healthcare system performance.

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MOAE0102
Is HIV funding strengthening the health system? A quasi-experimental study in Rwanda
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Background: HIV/AIDS has brought new resources and new questions to international public health over the past twenty years. Policy makers are concerned whether the considerable influx of HIV/AIDS funding has undermined existing health care system in the recipient country. By examining the inputs and outputs of health services, this study assesses the impact of HIV/AIDS funding on the primary health care system in Rwanda.

Methods: Using a quasi-experimental design, this study examined the impact on primary health care system in Rwanda. The study considered whether the considerable infl ux of HIV/AIDS funding has undermined existing health care system in the recipient country. By examining the inputs and outputs of health services, this study assesses the impact of HIV/AIDS funding on the primary health care system in Rwanda.

Results: Our results demonstrate no significant difference in the change in the malaria-related death rate, TB mortality rate, MVC and DTP3 infant immunization rates between PEPFAR focus countries and control countries prior to and after PEPFAR activities. The USMR did decrease by 22.4% (p = 0.0001) in PEPFAR focus countries in comparison to that in control countries after PEPFAR’s commencements.

Conclusions: Our results suggest that PEPFAR activities were associated with a significant reduction in the number of deaths among children under 5 years old. We observed no significant difference in the number of malaria-related deaths, TB mortality rate, and the change in measles and DTP3 infant immunization rates following the implementation of PEPFAR activities. Some promising trends are apparent regarding to healthcare outcomes following implementation of PEPFAR activities based on these results. Further efforts are warranted to better characterize the impact of PEPFAR and other such programs, on overall healthcare system performance.

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MOAE0103 How HIV/AIDS scale-up has impacted on non-HIV priority services in Zambia
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Background: To date, evidence on whether or not HIV scale-up has stimulated scale-up of other priority services has relied on correlation (ecological fallacy). We account for the ecological fallacy, whereby reported changes in non-HIV service outputs may be taking place at other facilities and not at those where HIV scale-up is underway. We conducted intra-facility analyses in Zambia to provide better evidence.

Methods: Client numbers and trends (2004-07) for selected HIV and non-HIV priority services in health centers were compared with those on ART (0.83), and family planning and HIV Voluntary Counselling and Testing (0.37). Unexpectedly, there were positive correlations between upward trends in client numbers on family planning and those on ART (0.83), and family planning and HIV Voluntary Counselling and Testing (0.38).

Results: Analyses that compare service performance with regard to health center characteristics that are not in the scope of ART services (control group) across five high prevalence provinces viz. Yunnan, Guangxi, Sichuan, Zhejiang, and Henan, indicate that ART scale-up has not undermined the performance of non-HIV priority services.

Conclusions: Although evidence is still emerging, there is no evidence to support the hypothesis that ART scale-up has undermined the performance of non-HIV priority services.

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MOAE02 Socio-economic Impact of HIV on Households

MOAE0201 Socio-economic impact of HIV at the household levels in China: the results from a five-province study
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Background: To strengthen responses to the socio-economic impact of HIV on individuals and households, a five-province study was undertaken in 2007-2008 with a sample size of 2222 households in China.

Methods: The methodology included both quantitative and qualitative techniques, including a questionnaire survey, focus group discussions and case studies. It employed multistage, systematic sampling and surveyed 1027 people in HIV-households and 995 people in non-HIV households (control group) across five high prevalence provinces viz. Yunnan, Guangxi, Sichuan, Zhejiang, and Henan.

Results: The socio-economic burden of HIV at the household level is significant compared to the non-HIV households. Reduced workforce participation of adults aged 15-64 years results in a total economic cost of RMB 21.3 billion for the 995 non-HIV households and RMB 48.1 billion for the 1027 HIV households. The HIV households are significantly more vulnerable than non-HIV households, with children’s socio-economic status being particularly affected. HIV households are more likely to experience reductions in income and asset ownership. Reduced educational attainment for children is also observed. HIV households are more likely to have children who drop out of school.

Conclusion: The socio-economic impact of HIV on households is substantial, with important implications for health policy makers and practitioners.

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MOAE0105 The relationship between HIV and AIDS programmes and health system strengthening: findings from six African countries
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Background: In many countries HIV/AIDS interventions have been restrained by deep-seated health system weaknesses. At the same time, the HIV/AIDS response offers unprecedented opportunities for health system strengthening. Our research identifies strategies for how HIV/AIDS programmes can best contribute to health systems strengthening (HSS) and vice versa.

Methods: In collaboration with local research institutions, case studies were conducted in Ghana, Kenya, Malawi, South Africa, and Swaziland. Data were collected through secondary analysis of existing documents, through semi-structured interviews with stakeholders at the national, district, and health facility level, and through focus group discussions. All countries gave ethical approval. Findings were analysed against financial and epidemiological trends using a realistic evaluation framework based on WHO health system ‘building block’ themes.

Results: Initial results show that the HIV/AIDS response has positively affected the size of the health workforce in several countries, has assisted in strengthening health care infrastructure-in particular laboratories-, and has contributed to redefining quality of care. The HIV/AIDS response has also created greater involvement of NGOs and CSOs, most specifically in HIV, TB and Malaria. However, there are mixed results on the pivotal issue of the impact of HIV responses on the health system functioning towards other health issues. Marked improvements due to HIV/AIDS related investments, such as availability of HIV-related drugs, are often counterbalanced by the effects of competition for scarce resources (human, infrastructural and financial).

Conclusion: We identify a number of examples where the HIV/AIDS response has contributed to elements of HSS. However, the evidence for broad impact on health systems is mixed and opportunities for achieving positive synergies have been missed. Our analysis, comparing and contrasting findings across countries, provides a contextual understanding of what works, what does not and how.

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**MOAE0204**

Accessing free antiretroviral therapy (ART) services is expensive for people living with HIV/AIDS (PLHIV) - a costing exercise of ART services at a tertiary HIV care centre in South India

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**Background:** National AIDS Control Organization (NACO) in India launched free ART program to provide ART for 300,000 by the end of 2011, falling significantly short of the estimated national requirements of an estimated 550,000. Further access to ART is suggested via private sector or public-private partnerships. But there is little clear information on unit cost to guide such initiatives. We examined the costs for ART provision at Government Hospital of Thoracic Medicine, Chennai, India.

**Methods:** Exploratory study and cross sectional survey undertaken to estimate costs. Provider costs for lab, drugs, outpatient and inpatient services; along with overhead cost was calculated. Direct and indirect costs incurred by PLHIV were calculated.

**Results:** Total free ART provision cost averaged $250 per patient per year. ART drugs averaged $156 per patient, Lab costs averaged $60, with CD4 testing contributing 52% to this. Staffing only accounted for 10% of the direct cost. PLHIV travel an average of 200 kms for ART. The expense incurred by PLHIV for ART per year was over $120 ($90 direct and $30 indirect), which represents approximately 10% of their total income. 50% of PLHIVs sampled earn more than $100 per year, suggesting that some PLHIVs receiving free ART could afford to share a greater fraction of their ART-related cost burden.

**Conclusions:** ART is less cost intensive than published literature suggests, with drug and lab costs continuing to be the cost drivers. Free ART services is expensive as PLHIV incur almost half the amount as the provider. We recommend initiatives to decentralize ART delivery and reduce costs incurred for accessing services. As direct ART costs continue to fall, alternative models of ART scale up which further limit indirect patient costs but requires patients to pay a greater fraction of drug/lab costs may allow governments to reach treatment targets otherwise economically unattainable.

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**MOAE0205**

An assessment of impact in care giving by old people in households with people living with HIV/AIDS in rural and urban Zambian communities

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**Background:** HIV/AIDS epidemic usually has devastating effects on economic, social, and psychological impacts on older people who take care of their AIDS adult children, both in urban and rural Zambia. Despite all the interventions that Zambian government has put in place, the impact of HIV/AIDS on older people remains under-reported as well as not been properly addressed by government and those working in the areas of HIV/AIDS. In this paper, we address ways through which older people are affected by HIV/AIDS.

**Methods:** A cross sectional survey covered parents who had lost a child to HIV/AIDS after enough time has passed for most impact to manifest, but not long ago that the respondent would have serious recall problems. Firstly a representative set of sample sites was sought and secondly, within each site, selected a probability sample of households. Within each district, an attempt was made to interview all AIDS parents that were identified, except in some urban areas where the number of cases was too large to cover the survey schedules, hence a systematic sample of those listed was interviewed.

**Results:** Of 859 households that were identified as having provided care to the deceased adult children in both Livingstone and Nakaonde 422 (49.1%) were 60 years or older. About 69.5% of the caregivers were females, and only 30.5% were identified as males. About 79.5% mentioned financial hardships. Over 75% experienced emotional upheaval (strained muscles or tiredness), another 96.0% lacked financial resources for dealing with adult children suffering from AIDS. Only 8.4% mentioned social stigma. In urban Zambia, 18% had sold assets which included their belongings, in order to support their sick children.

**Conclusions:** Interventions are needed to help reduce the impact on older people taking care of AIDS adult children, which should include day to day support to stop isolation and emotional support.

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**MOAE0202**

Socio-economic impact of HIV at the household levels in Indonesia: results from a seven province study

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**Background:** To generate evidence for strengthening responses to the socio-economic impact of HIV on individuals and households, a 7-province study was undertaken in 2009 with a sample size of 2038 households in Indonesia.

**Methods:** The methodology included both quantitative and qualitative techniques, including a survey of HIV positive individuals, FGDs and case studies. It employed purposive sampling and surveyed 1019 HIV-households and 1019 non-HIV households (control group) across 13 cities in seven provinces.

**Results:** Psychological burden of HIV and related factors such as fear, job loss & stigma seemed more daunting than the economic burden on the households. HIV positive households reported to 60% of respondents experienced stigma in healthcare settings, some even during ARV administration. Medical expenses of PLHIV households were more than 3 times higher than the non-PLHIV households and the former experienced loss of income 4 times higher than the latter. Cost factors also drove PLHIV households to migrate out of their places of domicile - about 32% of the respondents. The impact on education with inter-generational and gender consequences was evident: while the school dropout appeared the same among the lower age group (7-12 yrs) for both PLHIV and non-PLHIV households, it was about 10% higher for the former in the 13-15 yrs age group. Girl children dropped out twice as many times as boys. Majority of PLHIV households used up savings and borrowed while in some cases, children were sent to work.

**Conclusions:** Fear, stigma and psychological burden are as significant as the economic burden on PLHIV and their households and hence urgent action is required. Additional issues, such as loss of jobs, high medical costs, erosion of income and assets and impact on education, particularly on girl children, call for enabling environment and integration of responses to the socio-economic impact into the national and local AIDS-strategies.

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**MOAE0203**

The impact of HIV/AIDS on household dynamics and household welfare in rural Northern Malawi

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**Background:** Evidence from prospectively collected longitudinal data on the impact of adult HIV/AIDS deaths on household welfare is still relatively limited. Additional issues, such as loss of jobs, high medical costs, erosion of income and assets and impact on education, particularly on girl children, call for enabling environment and integration of responses to the socio-economic impact into the national and local AIDS-strategies.

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MOAE0301
High loss to follow up rate among individuals in urgent need of antiretroviral treatment in Malawi and Kenya - cohort reporting that does not include this group is biased and misleading

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Description: The impact of PE defaulter tracing was assessed over 6 months (Oct 08- Mar 09) at 20 CTCs with 12,000 active patients from Kagera, Kigoma, Pwani and Zanzibar. 966 clients had either missed appointments or were LTFU. PEs reached 574 (59%) of clients, revealing that 132 (23%) clients had died and 442 (77%) were still alive. Of 442 clients successfully traced and alive, 163 (32%) returned to the CTC and re-engaged in treatment. Reasons for defaulting include distance/transport (44%), transferred / changed address (24%), drug side effects (11%) and alternative treatment (21%).

Results: The impact of PE defaulter tracing was assessed over 6 months (Oct 08- Mar 09) at 20 CTCs with 12,000 active patients from Kagera, Kigoma, Pwani and Zanzibar. 966 clients had either missed appointments or were LTFU. PEs reached 574 (59%) of clients, revealing that 132 (23%) clients had died and 442 (77%) were still alive. Of 442 clients successfully traced and alive, 163 (32%) returned to the CTC and re-engaged in treatment. Reasons for defaulting include distance/transport (44%), transferred / changed address (24%), drug side effects (11%) and alternative treatment (21%).

Conclusion: Trained and supervised peer educators in Tanzania are highly effective in tracing patients and re-engaging them in HIV/AIDS services.

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MOAE0304
Involving PLHIV in successful home visit system to improve antiretroviral therapy ARV program retention in Mozambique

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Results: Between January 2008 and December 2009, 14,120 patients received ART at Lighthouse. Missed appointments occurred in 1121 patients (54% females), out of these 580 (45%) were traced by the programme and 613 (55%) were not traced. After tracing 61% of the patients returned to care compared to 39% who were not traced, but returned independently. About 65% of the returned ‘traced’ patients restarted ART within 4 weeks after the missed appointments. We compare the patterns of ART re-uptake between traced and not traced patients.

Conclusion: Informing the challenge to support patients in a long-life therapy, the B2C programme improves the early treatment re-uptake and retention in care. However, a better understanding of reasons for and virological consequences of treatment interruptions need to be investigated.

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MOAE0305
Monitoring retention and mortality in Malawi’s National ART Programme: improved outcomes with earlier treatment initiation and decentralization of services

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Background: Malawi has achieved an unprecedented scale-up of ART since 2004 in an extremely resource-constrained environment. A nationally comprehensive, closely supervised M&E system has been essential for this success. Routine monitoring data include a differentiated analysis of time of death after ART initiation and stratified ‘cohort survival analyses’. 

Methods: Each quarter, a rolling analysis of cohort outcomes is performed at all clinics for patients who registered 1, 2, 3, 4 and 5 years before the quarter evaluated. All deaths are classified according to the month of death after ART initiation. Early mortality risks are estimated from deaths occurring in the first 3 months after ART initiation divided by patients newly initiated an ART in the same time period.

Results: By October 2009, 183,147 (72%) of 253,154 patients ever started were retained alive on ART. Early mortality peaked in 2005 at 15% and stabilized around 5%. Twelve-month retention rates improved from 71% to 79%. As of September 2009, retention rates at 2, 3, 4 and 5 years after ART initiation were 69%, 63%, 57% and 54%. The proportion of patients starting ART in WHO clinical stage 4 declined from 25% to 10%. The number of ART sites increased from 24 in 2004 to 339 in 2009.

Conclusions: Treatment outcomes have improved considerably in the course of rapid ART scale-up, although the target of 85% retention at 12 months is not yet reached. Early mortality may not decline much below 5% unless availability of treatment and opportunistic infections is much improved and/or more timely access to ART can be achieved through scale-up of routine pre-ART follow-up. Long-term survival outcomes are still unsatisfactory, but are likely a legacy of late ART initiation at the beginning of the program. Malawi’s critical shortage of human and financial resources remains a key constraint for improving ART access and retention.

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MOAE0402
Can better toxicity and durability profiles of more expensive first line treatment antiretrovirals offset their costs in resource limited settings?

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Background: Based on new WHO recommendations, many national HIV programs in resource limited settings are moving away from first-line regimens with stavudine (d4T) backbone in favor of costlier regimens with zidovudine (AZT) or tenofovir (TDF). It is commonly suggested that the increased costs of these regimens will be offset by savings due to reduced toxicity and enhanced durability.

Methods: CHAI developed a simple calculator to estimate the cost and rates of toxicity and migration to second-line that would be required for two different priced regimens to be cost-effective in 10-years. Using CHAI drug prices, users can input the annual incidence of toxicity, cost per toxicity, and the rate of migration to second-line for each cost-regimen. The only output parameters are that would have to be achieved with the more expensive regimen to offset the additional costs.

Results: The low-level of spending on toxicity and second-line ART in most resource limited settings may make it difficult to recover costs in these areas. For example, moving from d4T/3TC/TPV to TDF/3TC/EFV will increase drug costs by 120-USD/person-year. Offsetting this cost is only possible by using exaggerated assumptions for d4T – if spending on d4T-related toxicity is above 350 USD/toxicity and occurs in at least 25% of patients annually and if at least 3-4% of patients migrate to second line annually. To reach cost neutrality over 10-years, there must be a 40% reduction in the cost per toxicity, a 70% reduction in the incidence of toxicity, and a 60% reduction in migration to second-line for TDF.

Conclusions: The shift to costlier first-line regimens will raise the cost of treatment that likely cannot be offset by savings due to reduced toxicity or improved durability, in most sub-Saharan African settings.

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MOAE0403
Cost-effectiveness of World Health Organization first-line HIV treatment guidelines in Africa

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Background: The World Health Organization (WHO) released new guidelines for first-line antiretroviral therapy in resource-limited settings. The comparative- and cost-effectiveness of the guidelines have not been evaluated.

Methods: Using a model-based simulation of HIV disease and treatment in Africa, we compared quality-adjusted life expectancy, lifetime costs, and cost-effectiveness of five initial treatment strategies: four WHO recommended regimens (efavirenz or nevirapine with tenofovir and zidovudine, and lamivudine) and the most common regimen in use (nevirapine, stavudine, and lamivudine). The primary determinants of regimen effectiveness and cost-effectiveness were rates of virologic suppression, toxicities, and drug costs.

Results: Compared with nevirapine/stavudine/lamivudine, nevirapine/zipidovine/lamivudine was more effective (projected survival 126 vs. 124 discounted quality-adjusted months) and less costly (12,711 vs. 12,824 2008USD lifetime medical costs; see figure). Nevirapine/tenofovir/lamivudine was associated with an incremental cost-effectiveness ratio of $1,045 per quality-adjusted life year (QALY) gained compared with nevirapine/zidovudine/lamivudine. Efavirenz/tenofovir/lamivudine was associated with an 84% reduction in toxicity rates, 75% reduction in toxicity and migration to second-line that would be required for two different priced regimens to be cost-effective in 10-years. Using CHAI drug prices, users can input the annual incidence of toxicity, cost per toxicity, and the rate of migration to second-line for each cost-regimen. The only output parameters are that would have to be achieved with the more expensive regimen to offset the additional costs. For example, moving from d4T/3TC/TPV to TDF/3TC/EFV will increase drug costs by 120-USD/person-year. Offsetting this cost is only possible by using exaggerated assumptions for d4T – if spending on d4T-related toxicity is above 350 USD/toxicity and occurs in at least 25% of patients annually and if at least 3-4% of patients migrate to second line annually. To reach cost neutrality over 10-years, there must be a 40% reduction in the cost per toxicity, a 70% reduction in the incidence of toxicity, and a 60% reduction in migration to second-line for TDF.

Conclusions: The shift to costlier first-line regimens will raise the cost of treatment that likely cannot be offset by savings due to reduced toxicity or improved durability, in most sub-Saharan African settings. More funds must be made available to support increased HIV treatment budgets.

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Costs and benefits of first-line ART strategies
MOAE0404
Cost-effectiveness analysis of first-line ART regimens for the treatment of HIV-infected patients in resource-limited settings

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Methods: We performed a cost-effectiveness analysis comparing first-line ART combinations included in the new guidelines. A Markov chain model simulated the progression of HIV-infected adults starting ART with CD4 counts <350. Transition probabilities and AIDS mortality were based on the ALPHA network data. The model incorporated AIDS surveillance data, and regional data. Annual costs from resource-limited settings were calculated as a weighted average of drug costs for different regions, based on the WHO Global Price Reporting Mechanism database for ARVs. Country-specific service delivery costs were calculated utilizing the WHO CHOICE database. Treatment-specific toxicities were incorporated and treatment combinations were compared based on their cost per life-year and cost per quality-adjusted life-year. The analysis was based on a health care system perspective over a ten-year horizon.

Results: Generalized cost-effectiveness analysis for the three regimens in low-income countries resulted in discounted costs per quality-adjusted life-year of US$ 619 using d4T+3TC+NVP, US$ 641 for AZT+3TC+NVP and US$ 727 for TDF+3TC+NVP. Compared with d4T+3TC+NVP, the alternative regimens were more effective, yielding higher gains in quality-adjusted life-years, and had incremental cost-effectiveness ratios of US$ 1,170 for AZT+3TC+NVP and US$ 1,520 for TDF+3TC+NVP.

Conclusion: Cost effectiveness is essential in the context of innovation, drug substitution and changing market prices. Our cost-effectiveness analysis for all variants of ART fell below the WHO threshold of 16 dollars/1,695 GDP per capita in sub-Saharan Africa, and thus the therapies should be regarded as very cost effective. Moreover, a threshold analysis shows that policy makers might have small price reductions would allow a rapid drug substitution by less toxic and more durable antiretroviral combinations.

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MOAE0405
ART for prevention of HIV transmission in South Africa: estimated cost and cost-effectiveness

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Background: HIV prevention efforts appear unlikely to end the epidemic, due to imperfect effectiveness and coverage. Mathematical modeling suggests expanding ART (anti-retroviral therapy) for infected individuals can dramatically reduce the epidemic curve, especially when combined with expanded prevention. We conducted a cost and cost-effectiveness analysis of projected prevention benefits of voluntary HIV testing, counseling and expanded ART in South Africa.

Methods: We model annual HIV testing and several ART scenarios: 1) current practice; 2) ART offered for CD4 < 200 cells/mm³; 3) CD4 < 350 cells/mm³; 4) CD4 < 500/mm³; and 5) regardless of CD4 (universal).

Epidemiologic modeling uses our published deterministic compartmental model. We estimated at baseline that ART reduces transmission by 91%. Outcomes include HIV infections, deaths, disability adjusted life years (DALY), cost and cost-effectiveness. Analyses were conducted for current and enhanced prevention, with sensitivity analyses for input values.

Results: New HIV infections over 40 years decline 67%, from 15.6 million (*high scenario) to 5.1 million (*low scenario). Deaths decline by 5.2% (from 12.3 to 5.9 million) and DALYs by 45% (from 108 to 59 million). Universal ART reduces infections by 4.9%. Reductions versus CD4 < 350. For other scenario comparisons, the incremental cost-effectiveness ratio (ICER) varies from $86 to $329 (DALY averted). Enhancing prevention (40% lower HIV incidence) reduces DALYs averted by 1/3 and cost differences by 1/3, leading to lower ICERs of $30 to $249. If ART reduces transmission by 99%, savings from universal versus CD4 < 350 reach $14 billion, and ICERs drop to a maximum of $230.

Conclusions: Increasing provision of ART could reduce costs over 40 years or achieve attractive cost-effectiveness, while sharply reducing the burden of HIV.

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MOAF0104 Lifting the federal ban on the funding of syringe exchange: an advocacy campaign

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Issues:
The United States instituted a ban on the use of federal funds for syringe exchange in 1988. Advocates launched a renewed campaign to overturn the ban in 2006, resulting in Congress removing the restriction in late 2009 and paving the way for the use of federal funds to support syringe exchange.

Description:
Direct advocacy to lift the federal ban occurred in two distinct time periods: 1997-1998 and 2006-2009. In 2006, the Harm Reduction Coalition contracted a communications company to analyze messaging and messages, in preparation for escalating Congress about syringe exchange. The report looked at media responses to the 1997 campaign and a 2006 effort that eliminated HIV/AIDS restriction on the use of local money for syringe exchange in Washington DC. The analysis showed that media and community attitudes to syringe exchange had altered considerably during intervening years, and guided the development of a new strategy and message for the campaign.

Lessons learned:
Several strategies were critical to the success of the campaign. First, direct advocacy in the form of discrete, on-going educational and campaign targeting key Congressional leaders including grassroots organizing by syringe exchanges within engaging multiple advocacy partners both in Washington, DC and regionally, with an emphasis on prioritizing the ban in HIV agendas; a media campaign which garnered support for lifting the ban from key funders; and identifying and building relationships with individuals and agencies who could not be easily reached and educating champions within Congress. This was crucial to keep the campaign visible and viable.

Next steps:
This campaign learned from this successful advocacy campaign of the need to target other advocacy campaigns for HIV and health issues affecting marginalized populations.

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MOAF0105 Total recall: Reviving cultural use exemptions in drug law

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Issues:
In India, prohibition guides the legal framework on narcotic and psychotrophic drugs. Yet, there are exceptions within the law that permit consumption and possession of certain drugs. Originating in culturally accepted use, these provisions have been sidestepped to favor a zero tolerance approach. Cultural use can be revived as legitimate harm reduction, an alternative in reducing the risk of substance use in communities, for medicinal and recreational purposes. The concept bears semblance with present day prescription programmes, where users obtain heroin or opiates substitutes from an authorized source and in specified quantity, reducing the risk from adulteration and overdose. Such methods can shift users away from injecting opioids, which is driving HIV transmission among people who use drugs. Overhauled by penal aims, drug law enforcement has ignored these measures, despite their potential benefits.

Lessons learned:
The legal basis for the next generation of harm reduction may already exist. It is possible to fit prescription and supervised use within exemptions provided in drug law. Provided for as “delegated legislation”, State governments can invoke flexibilities to wean people who use drugs from risk, stigma and illegality into nets of health, safety and legitimacy.

Next steps:
Discrete advocacy and careful test cases are potential methods to revive the policy options described above. It is time to create enabling conditions and create space for cultural use of drugs.

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MOAF0202 Availability and accessibility of opioid medications in Ukraine

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Issues:
Tens of thousands of people living with or at risk of contracting HIV in Ukraine require opioid medications, either for treatment of drug dependence (e.g., methadone) or for moderate to severe pain related to HIV disease (e.g., morphine). Yet, most of these people do not have access to opioid medications due to poor availability. This leads to severe suffering by people who require opioid analgesics and continued dependence and increased risk of HIV infection for people who are opioid dependent.

Description:
Our research focused on understanding regulatory barriers to availability of opioid medications. We examined Ukraine’s drug regulations and compared them to the requirements of the UN drug conventions and recommendations made by the World Health Organization (WHO) and International Narcotics Control Board (INCB) for ensuring adequate availability of therapeutic opioids to determine the level of compatibility. We interviewed doctors and patients to examine the impact of Ukraine’s regulations on the availability and accessibility of opioid analgesics and on quality of life.

Lessons learned:
Ukraine’s drug control regulations and practices are far more restrictive than required by the UN drug conventions or recommended by the WHO and INCB. Complex licensing, storage, prescription and disposal requirements are serious barriers to availability and accessibility of opioid medications. A longstanding practice that opioid medications are only administered directly by healthcare workers to patients, observers of a maximum daily dose suggested by the supplier of injectable morphine, and the complete absence of tablet morphine lead to serious undertreatment of patients with severe pain.

Next steps:
Ukraine needs to urgently overhaul its drug control regulations to bring them in line with recommendations by WHO and INCB. Otherwise it will not be able to ensure appropriate treatment for people experiencing severe pain or scale up substitution treatment for opioid drug dependence.

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MOAF0203 Drug detention centers and HIV in China and Cambodia

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Issues:
In many Asian countries, people who use drugs are locked in “treatment” facilities for months or even years. Often run by military or public security forces and staffed by people with no medical training, these centers rarely provide HIV prevention, treatment, care or support services.

Description:
China’s 2008 law on narcotics control ends confinement of drug users in Re-education Through Labor centers, but allows for a period of up to 4 years in “compulsory rehabilitation” following a sentence of up to 2 years in compulsory detention. In Cambodia, over 300 drug users are detained in 11 centers throughout the country; around one in four are aged 18 or under. In 2009 HRW interviewed 33 current and former drug users in Southern China, and 53 in Cambodia, who had been recently released from drug detention centers. The interviews covered police harassment and arrest, general conditions in centers, as well as the provision of HIV and health services.

Lessons learned:
Research in both countries identified illegal arrest and detention without charge or trial. Individuals reported being ill-treated by guards or other detainees, being forced to work, and being denied medical care. Detention in illegal and ineffective drug detention centers was identified as a barrier to accessing HIV prevention and treatment services.

Next steps:
Focusing upon compulsory detention highlights the interrelationship of human rights and effective HIV policies for drug users. Advocacy that focuses on due process protections, freedom from arbitrary detention and freedom from torture and ill-treatment for people who use drugs also promotes structural interventions to reduce the elevated risk of HIV infection and poor treatment in closed drug detention settings. While the Chinese and Cambodian governments have expressed commitment to improving conditions in these settings, HRW’s position is that drug detention centers be immediately closed.

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MOAF0204
Improving the drug rehabilitation system in Vietnam: a two-track strategy

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Issues: Vietnam’s current drug “rehabilitation” system prescribes commitment for up to 2 years in a “06 center” for detoxification, moral education, and labor plus up to two years of post-detoxification management either in a center or in the community. The current system provides little or no evidence-based treatment and only very limited HIV/AIDS services. HIV prevalence among 06 center residents is ~50% and relapse rates among releases from centers are 70-90%. The current system represents a moral and punitive approach to a medical and psychosocial problem.

Description: Health Policy Initiative Vietnam, a USAID/PEPFAR-funded project, is taking a two-track strategy: 1) Build evidence to advocate for fundamental systemic change; and 2) because systemic change is unlikely to occur soon, work for evidence-based improvements to benefit the thousands of individuals who are subjected to the current system. To build evidence for systemic change, we recommend the first full-scale evaluation of the efficacy and cost-effectiveness of the current center-based system and emerging community-based alternatives. To improve the current system, we work to incorporate in new legal documents (implementing decrees and circulars under the revised Drug Control Law) provisions that will send fewer people to centers for shorter periods, and expand evidence-based treatment, including methadone and addiction counseling, and deliver more comprehensive HIV/AIDS services in 06 centers and community settings.

Lessons learned: Strong ideological, political and economic interests support maintenance of the current system, but some key government officials as well as emerging civil society groups, and international organizations are committed to working for positive change.

Next steps: HPI will continue to pursue both systemic change, through development of the evidence base and, in collaboration with key stakeholders and the Vietnamese government, change in the current system through focused drafting, review, and revision of decrees, circulars, and other legal documents.

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MOPDA1 Viral Dynamics and Fitness

MOPDA101 Rapid evolution of HIV-1 repairs a severe genetic defect by reducing interaction of Gag with viral RNA that is detrimental to virion maturation

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Introduction: HIV-1 possesses several RNA secondary structures in the viral genome that are important for regulating viral replication. The stem-loop 1 (SL1) in the 5’ untranslated region directs HIV-1 genomic RNA dimerization and packaging into virions. Without SL1, HIV-1 cannot replicate in human T cells. Here, we identified two independent compensatory mutations that enable HIV-1 to replicate without SL1 and delineated the mechanisms of the compensation.

Methods: HIV-1 carrying a 43 nt deletion of SL1 (NLASSL1) was used to infect PM-1 cells. Viruses with a 42 nt (p24 ELISA) and compensatory mutation were identified by RT-PCR/sequencing. HIV-1 RNA in the virion was measured by quantitative RT-PCR. Gag-viral RNA interaction in the cell was quantified by immunoprecipitation/quantitative RT-PCR.

Results: NLASSL1 did not replicate in PM-1 until two independent non-synonymus mutations emerged: C1907T in SP1 on day 11 postinfection and G913A in matrix (E42K) on day 18 postinfection. NLASSL1 revertants carrying either point mutation replicated in PM-1 similar to the wild type. Specifically, both mutations resulted in significantly more virion production and more infectious particles per ng of p24 than the NLASSL1. Compared to the wild type, NLASSL1 packaged 3 - 4 folds more spliced HIV mRNA into the virion interfacing with maturation. In contrast, both revertants effective excluded and packaged 2.5 - 3 folds less of these RNA species thereby facilitating maturation and restoring infectivity. We also provided direct evidence showing that there was a marked reduction in the interaction of revertant Gag with spliced viral mRNA.

Conclusions: We observed rapid evolution of HIV-1 that overcame a severe genetic defect in SL1. The compensatory mutations shed light onto the functions of N-terminal matrix domain and SP1. Both regions have a role in interactions with different viral RNA transcripts and discriminating against those that interfered with the maturation process.

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MOPDA102 Dislocation of the frameshift signal uncouples gag and pol reading frames and reveals the role of the transframe protein p6* in HIV-1 replication

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Background: The complex sequence context of the human immunodeficiency virus type 1 (HIV-1) frameshift region together with the overlapping gag and pol reading frames impose major limitations on mutational analysis of involved proteins like the transframe protein p6*, so little is known about its function in the virus life cycle. Located between the nucleocapsid and protease (PR) in the Gag-Pol precursor, p6* cleavage is absolutely essential for PR activation and subsequent processing of the precursors, as we recently reported. However, comprehensive mutagenesis of the entire p6* sequence in the proviral context is not feasible without affecting the frameshift signal or the overlapping gag sequences (p1-p2*).

Methods: To overcome these limitations, we created a novel NLA-3-derived provirus by dislocating the original frameshift signal to the 3’ end of the gag gene thereby uncoupling the pol from the gag reading frame, which proved to be replication competent.

Results: Hence extensive deletions and substitutions were introduced into the p6* sequence, which surprisingly had no detrimental effects on viral fitness. Nucleotide expression of heterologous reporters within the p6* reading frame drives their incorporation into virions.

Conclusion: Dislocation of the exogenous frameshift region of Gag and Pol domains do not disturb viral functions of this novel virus, it represents a valuable tool for independent analysis of HIV domains which are difficult to access in a natural virus context. Furthermore this study could reveal that the p6* wildtype sequence, apart from the cleavage sites, is dispensable for HIV-1 replication, suggesting that it might serve as a spacer region.

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MOPDA103 Functional integrity of naturally mutated forms of HIV-1 subtype C Vpr: comparison with subtype B and the consensus sequence of the protein

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Background: Vpr is an accessory protein of HIV-1 with a variety of functions, including nuclear export of HIV-1 preintegration complex (PIC), induction of G2 arrest, induction of apoptosis, and modulation of gene expression. Although these functions have been studied in subtypes B, there is less information on the functional integrity of Vpr from other subtypes and naturally mutated forms of this protein remains understudied.

Methods: Expression vectors were constructed for subtype B Vpr, the consensus sequence of HIV-1 subtype C Vpr, and 6 naturally mutated HIV-1 subtype C Vpr proteins: The 293T cell line was transfected with the different constructs and the ability of HIV-1 subtype C Vpr for nuclear localization, apoptosis induction, cell cycle G2 arrest, and modulation of gene expression was compared with each other and the wild type subtype B Vpr.

Results: All the Vpr proteins localized to the nucleus which is necessary to transfer HIV-1 PIC to the nucleus. Subtype B and the naturally mutated forms of subtype C Vpr induced apoptosis in 99% and 95-98% of the transfected cells, respectively. The consensus sequence of subtype B Vpr induced apoptosis in 85% of the transfected cells. Subtype B, the consensus sequence of subtype C and the naturally mutated forms of subtype C Vpr induced G2 arrest in 67%, 66% and 58-66% of the transfected cells, respectively. Modulation of gene expression by subtype C Vpr was shown for several genes and compared with subtype B.

Conclusions: The study shows that subtype C Vpr carries out the same functions of subtype B Vpr and in a similar manner. The natural mutations studied in our isolates do not disturb the functions of subtype C Vpr and in some cases even potentiate the protein to induce apoptosis. The study suggests an adaptive role of the natural mutations commonly found in subtype C Vpr.

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MOPDA104 Effects of substitution mutation at the HIV-1 reverse transcriptase tryptophan repeat motif on virus assembly and processing

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Background: A highly conserved hydrophobic cluster consisting of six tryptophan (Trp) residues has been identified, C1907W is the reverse transcriptase (RT) subunit (codons 391-414). We previously demonstrated that alanine substitution at W401 abrogates the enhancement effect of efavirenz (EfV; a non-nucleoside RT inhibitor) on protease (PR)-mediated Gag processing efficiency while the W402 with alanine or leucine significantly reduces viral release as a result of enhanced Gag processing efficiency (J. Virol. 2010; 84:976-982). It remains to be determined whether mutation of the other Trp residues have the similar effect on Gag processing efficiency.

Methods: Each Trp residue within the Trp repeat motif was substituted with alanine, and the resultant constructs were transiently expressed in 293T cells. Virus assembly and processing were assessed by Western blot. Effects of the substitution mutations on virus replication were determined by a single-cycle-infection assay.

Results: All the mutations significantly affect viral infectivity and viral RT incorporation, presumably due to their Trp instability. The exception to this rule is W410A, which demonstrated a viral infectivity at near-normal level and virus-associated RT at a level comparable to that of the wild type. Almost all the mutations did not markedly affect steady-state Gag processing, W398A and W407A both conferred partial resistance to the EFV enhancement effect on Gag processing. In addition, double substitution mutation (W398A/W406A) significantly impaired PR-mediated virus processing.

Conclusions: Our data suggest the HIV-1 RT Trp repeat motif plays a role in the process of PR activation, possibly via modulating the Gag-Pol multimerization.

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MOPDA105 Viral dynamics in plasma and seminal fluid among patients receiving resistance testing-guided HAART

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Background: The genital tract has been indicated as a potential protected anatomic sanctuary were viral replication could occur despite viral suppression in plasma. Recognition of failure to suppress viral replication within the genital tract is essential to avoid potential HIV-1 sexual transmission. We evaluated plasma (PL) and seminal fluid (SF) HIV-1 reverse transcriptase (RT)-guided HAART.

Methods: We prospectively assessed viral decay kinetics in 6 patients with virological failure receiving GRT-guided HAART. Parallel PL and SF samples were collected at baseline and weekly. The rate of log HIV RNA changes were estimated. At baseline, genotypic resistance pattern has been detected in PL, in all patients and in SF in 3 patients because of low HIV RNA levels in the volume of samples or assay limitations.

Results: At baseline, the levels of HIV RNA were higher in PL than in SF...
MOPDB1 Issues in HIV Therapy and Resistance

MOPDB101 HIV-infected subjects treated with an autologous dendritic cell vaccine (AGS-004-001) exhibited a significant reduction in viral load (when compared to pre-ART viral load) and delay in the time to viral rebound during a 12 week STI

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Background: We have previously demonstrated that AGS-004 immunotherapy (dendritic cells electroprotected with autologous RNA encoding select HIV antigens), was able to induce immunity without activating CD T cells. AGS-004-001 is a multi-center phase 2 trial designed to assess the efficacy and safety of AGS-004 during a 12 week ART structured treatment interruption (STI).

Methods: Subjects on ART therapy, with viral load (VL) < 50 copies/mL, CD4 > 450 cells/µL, a CD4 nadir > 200 cells/µL were eligible. The treatment consisted of 4 iG AGS-004 doses administered monthly with ART, followed by two additional doses during the 12 week STI.

Results: 38 subjects were enrolled and 29 have received AGS-004 to date. Compared with historical controls, a delay in the median time to VL rebound (>50 copies/mL) and to peak VL was observed (4.0 and 8.0 weeks respectively) during the STI. 18/20 (90%) of subjects completed the 12 week STI.

Conclusion: Successful enrollment and dosing has now been demonstrated for this personalized immunotherapy in a multi-center study. AGS-004 was safe, well tolerated and resulted in an unexpectedly long delay in viral rebound, time to peak VL during STI and a markedly reduced VL when compared to pre-ART levels. These results are encouraging and warrant further evaluation of AGS-004 in the upcoming double-blind, placebo-controlled randomized study.

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MOPDB102 Indicators of therapeutic vaccine effect using GTU-MultiHIV B clade DNA in treatment-naive subtype C HIV-1 infected subjects

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Background: Therapeutic vaccination is an important adjunct to the management of HIV infected individuals to decrease transmission and slow down disease progression. This phase IIb/IIIb trial report using a plasmid DNA comprising complete sequences of Rev, Nef, Tat, p17/g protein, and epitope stretch of previously identified T cell epitopes in pol and env of a subtype B HIV-1 Han-2 isolate.

Methods: 60 subtype C HIV-1 infected individuals with CD4 counts >350 x 10^6/L and HIV-1 RNA levels <50 copies/mL at screening were randomly allocated to receive vaccine or placebo at 2:1 and received either ID(0.5 mg/dose) or IM(1 mg/dose) DNA vaccinations administered at 0, 1, 3 months, with boosts at 19 and 20 months with 1 mg/dose (ID) and 2 mg/dose (IM). Efficacy endpoints were viral loads and CD4 counts. Immunogenicity was evaluated using IFN-g ELISPOT reactivity to B and C consensus peptide pools. HLA typing was performed with sequence-based typing (SBT).

Results: IM vaccine delivery resulted in a significant CD4 count increase (p=0.013) and a 0.5 log decrease in viremia (p=0.002) at 108 weeks of follow-up. Vaccine effect was seen vs SF change in VL at 12 weeks and increase in CD4 after boosting at 64 weeks. HLA typing also supported the vaccine effect after the exclusion of known HLA types which are associated with slower progression. T cell responses to encoded epitopes in B and C peptide pools were observed after ID vaccination rather than IM. There were no vaccine related serious adverse events (SAE) and mild to moderate reactogenicity.

Conclusions: There was a significant reduction in viral load and increased CD4 counts after IM vaccination. The concept was further demonstrated by responses after boosting and in data controlled for HLA type. The investigational HIV-1 vaccine, GTU-MultiHIV B clade is safe and well tolerated and has demonstrated clinical effect.

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MOPDB104 Prevalence and predictors of etravirine resistance in Thai HIV-infected adults failing first-line NNRTI-based regimens

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Background: Etravirine (ETR) is an NNRTI that retains anti-viral activity against many viruses resistant to nevirapine or efavirenz. We report prevalence of ETR resistance in Thais with HIV infected adults failing first-line NNRTI-based regimens.

Methods: HIV-infected Thai failing NNRTI/NNRTI first line regimen from 9 sites had genotyping by a validated in-house method. Mutations were interpreted against many viruses resistant to nevirapine or efavirenz. We report prevalence of ETR resistance in Thais with HIV infected adults failing first-line NNRTI-based regimens.

Results: 225 adults with a mean (SD) age of 38(7.0) years, 41% female...
MOPDB105

Genotype and phenotypic susceptibility to etravirine in US samples received for routine resistance testing

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MOPDB106

Resistance mutations in drug-naive HIV-1 infected pregnant women and their children in China

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Background: Resistance mutations in drug-naive HIV-1 infected pregnant women and their children had not been studied in China before. We made a cross-sectional study of the resistance information in China.

Methods: Blood samples were collected from 165 drug-naive HIV-1 infected pregnant women in four provinces of China(Hebei, Guangxi, Xinjiang and Yunnan) at 36-week gestation in 2005-2008 after informed consent. They and their children took single-dose nevirapine(sdNVP) for the prevention of mother-to-child transmission(PMTCT). Viral-load, CD4 cell counts and BED assay were measured on all samples. The Assay was performed by the study group. The resistance profile and subtype information were determined. Dried blood spot (DBS) samples of their children were collected at 1 month postpartum for HIV infection identification and resistance genotyping.

Results: 138 baseline samples of women were amplified successfully. Primary sequences were determined on 29(21.3%) from which the NRTI resistance mutations were detected. The HIV-1 subtype in women from Henan, Guangxi, Xinjiang and Yunnan was 55% (3/138) of which 3 subtype B (41%), 10.1% (14/138) of which 3 inherited resistance mutations from their mothers. Vertical transmission correlated well with baseline resistance(r=0.05, p<0.05). The proportion of recent infections in positive pregnant women identified by the BED assay was 10.9%(18/165). 14.5%(24/165) of children got infected with HIV and 9 children harbored resistance mutations, 6 developed resistance mutations due to the administration of NRTI and 3 inherited resistance mutations from their mothers. Vertical transmission correlated well with baseline resistance(r=0.05, p<0.05).

Conclusions: NRTI and NNRTI resistance mutations were most common in HIV-1 infected pregnant women. The relative high prevalence of drug resistance in them and their children underscored the necessity for resistance testing to guide PMTCT and subsequent therapy.

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MOPDC1 Why and How to Prevent HIV and HCV in Drug Users

MOPDC101 Hepatitis C and HIV incidence among injecting drug users in Kabul, Afghanistan

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Background: In the Phase 3 DUET trials of the NNRTI etravirine (TMC125), 77.7% (n=916) of NNRTI-resistant patients with a Tmc125 etravirine weighted genotypic score (WSG) ≤ 2 or an Antiviral Test-folding change (FC) ≤ 3 at baseline, respectively, achieved < 50 HIV-RNA copies/mL at Week 48. The prevalence of etravirine susceptibility was investigated in clinical samples referred for routine resistance testing (RT) using Monogram Biosciences (MGB) etravirine WGS and Phenosense assay.

Methods: 14,940 samples submitted to MGR for RT from June 2008 to June 2009 were defined etravirine-Resistant if they carried at least one of the following mutations: A90G, L100I, K103N, K103Q, K103N, V106A, V106I, Y181L, Y181F, G190A, P225S, P227K, M230L, and P236L, where x represents any amino acid substitution. MGR’s etravirine WGS consisting of 30 mutations (Benhamida 2008) was used to define viral susceptibility with etravirine-susceptible defined as 0 to 14 mutations and etravirine full susceptibility as 0 mutations.

Conclusions: Phenotypic susceptibility to etravirine was determined using 2.9 and 10 as low and high clinical cutoffs, respectively. The impact of K103N on genotypic susceptibility to etravirine, with a genotypic score ≤3 denoting full susceptibility to etravirine score≥ 4 (5%) and score≥ 4 (49%). Multi-NRTI mutations were TAMs ≥ 4 in M184V was most common (79%) and 6.2% had K65R. Most common NNRTI K103N mutation, the proportion of etravirine genotypically-susceptible and fully susceptible phenotypically than genotypically, and more were etravirine-susceptible among those with K103N. The proportion of etravirine-susceptible and fully susceptible phenotypically than genotypically, and more were etravirine-susceptible among those with K103N on genotypic susceptibility to etravirine was also investigated.

Results: Among 5,482 (36.7%) NNRTI-resistant samples, 67.2% were classified as genotypically susceptible and 76.4% as phenotypically susceptible (median FC 0.8) to etravirine, with 10.7% having FC>10. Using Tibotec’s WGS, 67.4% of NNRTI-resistant samples were etravirine-susceptible (WSG≤2). Among NNRTI-susceptible samples (n=9,458), 99.5% had etravirine FC 0.20 (median 0.8) and 0.5% had FC>2.0 and < 10 (median 3.5). In a subset of NNRTI-resistant samples (n=4,514), with (n=3,198) or without (n=1,316) K103N mutation, the proportion of etravirine genotypically-susceptible phenotype<0.8 was 76.9% and 48.6%, respectively.

Conclusions: Using different interpretation systems, most samples received for routine resistance testing for etravirine treatment were susceptible to etravirine. Among NNRTI-resistant samples, more were etravirine-susceptible phenotypically than genotypically, and more were etravirine-susceptible among those with K103N.

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MOPDC102 Change in HIV prevention coverage among injecting drug users in Bosnia and Herzegovina between 2007 and 2009: a report from two respondent-driven sampling surveys

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Background: In many Eastern European countries injection drug use is the predominant mode of HIV transmission. In 2007, Bosnia and Herzegovina received a grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) part of which was channelled into HIV prevention among injecting drug users (IDUs). We assessed incidence of and risk factors for HIV and hepatitis C among injecting drug users in Sarajevo, Afghanistan.

Methods: IDUs actively injecting recruited into a prospective cohort completed behavioral assessments every three months and serological testing for HIV and HCV every six months for two years. Risk factors for HIV and HCV seroconversion were identified with logistic regression.

Results: Of 479 male participants, 76.0% attended at least one follow-up visit by 6 months, with 63.1% (N=298) completing the six month visit. Needle and syringe program (NSP) utilization at 3 and 6 months was 70.5% and 71.8%, respectively. At six months, 19.1% reported discontinuing injecting, with a mean time of 1.4 months. One-fourth (26.5%) had been arrested during the study period and 10.3% had been outside of Afghanistan. Few IDUs reported sharing needles/syringes (4.8%) or injecting equipment (13.0%). HIV and HCV Ab incidence at 6 months were 3.2% (100 person-years (95% CI: 0.40 - 4.6) and 66.7/100 person-years (95% CI: 55.9 - 77.5), respectively. HCV seroconversion was associated with sharing needles/syringes in the last 6 months (OR=1.15, p=0.01). Duration of injecting in the last 6 months (OR=20.7, p=0.02) and increasing duration of injecting (OR=1.9, 95% CI 1.1-3.2, p=0.018). However, age, gender, number of injection sites, and duration of injecting were not associated with ETR score≥ 4. Genotyping is required to guide physicians on the selection of ETR after first line NRTI failure.

Conclusions: Reported sharing of injecting equipment was relatively rare and discontinuation of injection was common, which may be attributable for reporting secondary to stigma associated with these activities. However, high levels of incident HCV infection and association of HCV seroconversion with risky injecting behavior indicate recent changes in the drug injecting environment. Further analysis of trends in HIV and HCV seroconversion may provide important corroborative information regarding efficacy of harm reduction programming in Kabul.

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the most often reported main source of injection equipment, the proportion of those who reported an NGO as the main source significantly increased in each city.

**Discussions**

**Cost-effectiveness of HIV prevention among intravenous drug users (IDUs) referring to Drop-in Centers (DICs) in Iran**

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t Background: From 2003, the country’s health policy makers decided to establish Drop-in Centers (DICs) to reduce drug injection related harms. This study conducted to analyze the cost-effectiveness of harm reduction programs in Iran.

**Methods:** 15 eligible DICs were randomly selected from 48 active centers all over the country. We gathered and compared high-risk behaviors data before and after presence of DICs. We considered HIV averted cases as our measurement unit of effectiveness by using the mathematical models to determine averted cases.

**Results:** Prevalence of HIV and HCV infections were 20% (95%CI: 17.9%-23.2%) and 43.6% (95%CI: 40.2%-46.6%), respectively. High-risk behaviors before and after DICs have no normal distribution and we used nonparametric tests. These tests showed that harm reduction programs significantly (p<0.05) reduced all high-risk behaviors after their existence. Mathematical models are used to determine the averted cases (HIV/AIDS). These models showed that harm reduction programs averted 1766.89 HIV cases during 1 year of intervention. The cost of each HIV averted case was 222 dollars and in comparison to the cost of care and treatment of each HIV/AIDS case in Iran, which is about 1100 dollars and regarding average 10-year life expectancy of HIV/AIDS cases, the total lifetime cost saving was 232,837,775 million dollars with saving cost ratio of 595:1. The cost-effectiveness ratio of harm reduction programs was equal to -$131778 per HIV averted. The results obtained from the sensitivity analysis indicates that the harm reduction programs were cost saving and cost-effectiveness.

**Conclusions:** Harm reduction programs are both cost savings and high cost-effective. The most common cause of HIV transmission in Iran is intravenous drug use by shared needle and syringe. To achieve the high level of success rate of programs, it is necessary to expand harm reducing programs coverage among intravenous drug abusers, especially long-term abusers.

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**MOPDC103**

**Trends in and determinants of the availability of HIV prevention services in substance abuse treatment facilities, United States, 2002 - 2007**

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**Background:** Substance abuse increases the likelihood of engaging in high-risk HIV-related behaviors. U.S. public health agencies recommend HIV prevention services to clients in substance abuse treatment (SAT) facilities. Data are limited about the extent to which such recommendations are implement-ed. This study examines trends in and determinants of the availability of HIV prevention services in U.S. SAT facilities.

**Methods:** Data for 2002-2007 from the National Survey of Substance Abuse Treatment Services - an annual census of U.S. SAT facilities - were analyzed. An average of 13,598 facilities participated in each year’s survey. Multivariate logistic regression analyses examine trends in and determinants of the availability of HIV prevention services (i.e., HIV testing and HIV/AIDS education/ counseling) in these facilities. Time trends were examined with dummy coded variables for year. Potential determinants included several facility characteristics (e.g., service, ownership, accreditation).

**Results:** Overall, 31.6% and 55.5% of SAT facilities offered HIV testing and HIV/AIDS education/counseling, respectively. Availability of HIV testing declined from 33.4% (OR=8.9; 95% CI=78.9) to 29.7% in 2007 (OR=8.1; 95% CI=99.110). HIV prevention services were more likely to be offered in government (OR=1.58, 95% CI=1.41-1.73) and private non-profit (OR=1.24, 95% CI=1.18-1.30) than in private for-profit facilities. Availability of HIV prevention services was also greater in facilities that received public funding (OR=1.47, 95% CI=1.41-1.53), accredited (OR=1.32, 95% CI=1.27-1.37), and had inpatient programs (OR=2.52, 95% CI=2.39-2.66) compared to facilities without these characteristics.

**Conclusions:** Availability of HIV prevention services in U.S. SAT facilities remains low, with signs of decline between 2002 and 2007. Service availability is significantly associated with facility characteristics, implying that efforts to expand HIV prevention services in SAT facilities must consider relevant organizational resources, needs, and constraints offering these services.

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**MOPDC104**

**HIV- and HCV-related behaviours and practices decline among people who smoke crack following implementation of controversial Safer Inhalation Program in Ottawa, Canada**

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**Background:** Compelling epidemiologic and virologic evidence suggesting the potential of HIV and HCV transmission use through the multi-person use of devices to smoke crack, together with increasing numbers of people reporting smoking crack necessitates a redirection of harm reduction efforts to include those whose mode of drug ingestion is inhalation rather than, or in addition to, injection.

**Methods:** The potential for people who smoke crack to attain their right to optimal health may be enhanced through the availability and accessibility of safer inhalation resources such as glass stems and mouthpieces distributed by a Safer Inhalation Program (SIP).

In this paper, we examine the impact of the recent availability of safer inhalation materials through Ottawa’s SIP on the HIV- and HCV-related practices of the multi-person use of devices to smoke crack.

**Results:** Street-recruited active crack smokers completed structured interviews six months prior to the implementation of Ottawa’s SIP, and 250 completed interviews six months post-SIP implementation.

Univariate analysis was used to determine differences in smoking practices between the two groups.

**Conclusions:** SIPs exist in very few jurisdictions in Canada and elsewhere and experience challenges in implementation and political acceptability. These data clearly demonstrate the utility of further investigation of SIPs as one means to enhance the right to health of people who smoke crack by reducing their HIV- and HCV-related transmission risks.

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**MOPDC105**

**Cost-effectiveness of HIV prevention among intravenous drug users (IDUs) referring to Drop-in Centers (DICs) in Iran**

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**Background:** From 2003, the country’s health policy makers decided to establish Drop-in Centers (DICs) to reduce drug injection related harms. This study conducted to analyze the cost-effectiveness of harm reduction programs in Iran.

**Methods:** 15 eligible DICs were randomly selected from 48 active centers all over the country. We gathered and compared high-risk behaviors data before and after presence of DICs. We considered HIV averted cases as our measurement unit of effectiveness by using the mathematical models to determine averted cases.

**Results:** Prevalence of HIV and HCV infections were 20% (95%CI: 17.9%-23.2%) and 43.6% (95%CI: 40.2%-46.6%), respectively. High-risk behaviors before and after DICs have no normal distribution and we used nonparametric tests. These tests showed that harm reduction programs significantly (p<0.05) reduced all high-risk behaviors after their existence. Mathematical models are used to determine the averted cases (HIV/AIDS). These models showed that harm reduction programs could averted 1766.89 HIV cases during 1 year of intervention. The cost of each HIV averted case was 222 dollars and in comparison to the cost of care and treatment of each HIV/AIDS case in Iran, which is about 1100 dollars and regarding average 10-year life expectancy of HIV/AIDS cases, the total lifetime cost saving was 232,837,775 million dollars with saving cost ratio of 595:1. The cost-effectiveness ratio of harm reduction programs was equal to -$131778 per HIV averted. The results obtained from the sensitivity analysis indicates that the harm reduction programs were cost saving and cost-effectiveness.

**Conclusions:** Harm reduction programs are both cost savings and high cost-effective. The most common cause of HIV transmission in Iran is intravenous drug use by shared needle and syringe. To achieve the high level of success rate of programs, it is necessary to expand harm reducing programs coverage among intravenous drug abusers, especially long-term abusers.

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**MOPDC106**

**Criminalization of drug users in Ukraine as a factor hindering the scale up access to HIV/AIDS prevention and treatment programmes**

A. Polunina

**Results:** High criminalization of drug users in Ukraine creates a significant barrier for them to access HIV/AIDS prevention and treatment. Simultaneously drug users remain a main driving force of the epidemic in Ukraine.

**Description:** Despite the lack of criminal liability for drug use, their possession in small amounts required to satisfy a chronic drug dependency is considered to be a criminal offence. This criminalization creates a significant barrier for the most widespread opiates in Ukraine are considerably lower than in Western Europe, and even Russia. Therefore, police, treatment, and criminal justice systems have to deal with this drug exchange points and even substitution therapy patients as potential criminals who are frequently are subject to pursuit, unjustified detentions and checks for criminal complicity. Concurrently, high corruption in police turns IDUs in one of the major source of illegal profit. Thus, in September-December 2009, all 50 SMT patients receiving treatment in SumyNarcologicalDispensary were repeatedly arrested by police; in fact, they were forced to get tested for drugs availability in urine, were exposed to ungrounded checks and human degradation procedures. In January2010, around 70 SMT patients were arrested by police on the premises of TernopiNarcologicalDispensary and delivered to police station for long checks on their complicity in unsolved crime. Other regions of Ukraine report about similar cases.

**Lessons learned:** Abovementioned conditions do not encourage drug users to keep used syringes and visit SEP. The mentioned police actions make the patients leave the SMT programmes quite often, since they do not want to stay under police pressure.

**Next steps:** It is required to change the national legislation related to decriminalization of drug dependent persons and ensure safe (on behalf of the police) work of prevention and treatment programmes (increasing the threshold for individual possession of drugs), amending the MIA orders in first priority of checks drug dependent persons on criminal complicity).

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MOPDD1 Reframing Messages and Methods: Media and Communications Around HIV

MOPDD102 Revising the work of listening: community interpretations of testimonial by women and men living with HIV in Canadian media

MOPDD103 Mobile phones in health services: perceptions and preferences of HIV-positive pregnant women in South Africa

MOPDD104 Movements against AIDS: facilitating networking among HIV-positive women journalists: lessons from Eastern and Southern Africa

MOPDD105 Preventing HIV transmission through multiple and concurrent sexual partnerships in Zambia: One Love Kwasila!
MOPDD106
Impact of PSI’s integrated behavior change communication program on male clients of female sex workers in Vietnam
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Background: HIV prevalence among female sex workers (FSWs) in Vietnam is 4.2%. This high prevalence increases the risk that male clients of FSWs act as a bridge for HIV to enter the general population. Since 2007, Population Services International (PSI)/Vietnam has implemented a comprehensive HIV prevention program targeting male clients. The program promotes correct and consistent condom use with FSWs and HIV voluntary counseling and testing (VCT) services. Communication messages are delivered through mass media and interpersonal communication activities (IPC). In 2009, a second round of behavioral surveys was conducted to evaluate the programmatic impact.

Methods: A stratified two-staged cluster sampling was used to approach male clients of FSWs in last three months in the program targeted entertain ment establishments. Responses from 1,602 male clients were analyzed using UNFPA’s and logistic regression model.

Results: 71% of respondents reported ever having exposure to the mass media campaign. 16% reported exposure to IPC in last 12 months with a mean score of 2.7 for number of contacts reported. The study found an association between frequency of contacts with IPC and increased consistent condom use with FSWs (p< .05). Among respondents reporting exposure to IPC, 80% were also exposed to mass media. Exposure to both IPC and mass media led to increased consistent condom use (p< .05). There was also an association between exposure to mass media and use of VCT services in last 12 months (p< .05). There was a further increase in use of VCT services in last 12 months among those exposed to both mass media and IPC (p< .05).

Conclusions: IPC plays an important role in promoting safer health behaviors among male clients. This impact is significantly increased when IPC exposure is combined with mass media. To enhance programmatic impact, PSI/Vietnam needs to increase coverage of IPC reach among male clients while sustaining high frequency.

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MOPDD107
Behavioral change and youth entertainment art
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Issues: Audiovisual art is a key vehicle for youth behavioral change towards HIV and related issues prevention. It can provide interactive messages on sexuality and gender that efficiently compete with opposing or neutralizing messages via two key factors of youth culture: peer acceptance and entertainment media.

Description: Since 2007, an interagency effort in Honduras (comprising UNICEF, WHO, UNFPA and UNESCO) has sponsored the production of entertainment pieces created by young people on HIV and related sexuality/gender issues. The following pieces are ready for presentation at the Vienna Conference: - The TV soap opera “Different to all” (106 minutes in total) - The 6 short film series “Short lives”, based on winner playwrights at the annual National Theater Festival.

Next steps: - Produce and wider distribution of new films and musical video clips created by young artists.

MOPDE1 Using Data to Improve HIV Care Delivery
MOPDE101
The role of prospective continuous data quality improvement (CQI) strategies in improving data quality for an HIV clinic database in Uganda
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Background: Analyses of clinic databases compliment findings from dedicated research cohorts; hence the need for high quality data from routine delivery of care to inform policy and practice. A number of CQI strategies have been implemented to address the gaps in the observational database including: - Loss to follow up tracking, electronic laboratory downloads, retrospective and prospective real time data validation processes. Our objective was to monitor the error rate through a prospective validation process.

Methods: The variables related to HIV clinical events such as the Karnofsky score, tuberculosis (TB) status, new Opportunistic infections (OIs) and toxicities are reported below. Data version 10.0 was used to generate totals, percentages and chi-square values for each of the variables.

Results: A total of 4123 patients’ files were reviewed out of which 515 (12.5%) contained errors due to incorrect or missing entries with an over all error rate of 2.5%, down from 4.65% in the pilot exercise. The average error rate due to missing entries (2.3%) for all the variables was 10 times the average error rate due to incorrect entries (0.23%) similar to what was observed in the pilot. However, the variable Karnofsky score has more errors (2.8%) due to incorrect entries than those due to missing entries (2.3%); this variable also had the highest total error rate at 3%. Among the major clinical variables, the entries for Toxicities had the highest error rates at 2.86% compared to those for New OIs at 2.33% and TB status at 2.18%.

Conclusions: Our preliminary analysis indicates that this prospective CQI strategy resulted in a significant reduction in data inaccuracies (both incorrect and missing). The CQI strategies mentioned above should be implemented simultaneously to complement each other. Prospective Validation can be duplicated in other clinical observational cohort databases within the country to better inform policy and practice.

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MOPDE102
Transition: from random telephonic survey to routine telephonic follow up of newly diagnosed HIV patients who utilize mobile counseling and testing units in South Africa
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Issues: HIV Counseling and Testing (HCT) should be the entry point into health caremonitor initiation on ART for clients who test HIV-positive. The aim of introducing call centre service is to offer HIV-positive clients a point of contact, where they are offered services such as mobile counseling and testing, and screened for opportunistic infections and TB.

Description: A random telephonic survey in 2009 revealed an initiation rate of 3% amongst a group of clients who tested positive during FPD’s mobile HCT campaigns. A structured approach to post-test follow up was initiated in an effort to determine the initiation rate and to improve reliability of data on which results are based. The current initiative includes development of an electronic database. Random telephonic follow up of clients who have utilized Foundation for Professional Development (FPD) mobile HCT units for HIV testing.

Results: A total of 4123 patients’ files were reviewed out of which 515 (12.5%) contained errors due to incorrect or missing entries with an overall error rate of 2.5%, down from 4.65% in the pilot exercise. The average error rate due to missing entries (2.3%) for all the variables was 10 times the average error rate due to incorrect entries (0.23%) similar to what was observed in the pilot. However, the variable Karnofsky score has more errors (2.8%) due to incorrect entries than those due to missing entries (2.3%); this variable also had the highest total error rate at 3%. Among the major clinical variables, the entries for Toxicities had the highest error rates at 2.86% compared to those for New OIs at 2.33% and TB status at 2.18%.

Conclusions: Our preliminary analysis indicates that this prospective CQI strategy resulted in a significant reduction in data inaccuracies (both incorrect and missing). The CQI strategies mentioned above should be implemented simultaneously to complement each other. Prospective Validation can be duplicated in other clinical observational cohort databases within the country to better inform policy and practice.

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Tracking defaulters in ART clinics using a simplified paper-based record filing system in Vryheid, Kwa-Zulu Natal province, South Africa

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Background:
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Issues:
In resource limited settings, national Departments of Health (DOH) are often unable to develop and maintain electronic patient level databases. Instead patient-level events are monitored using multiple non-standardized and unlinked data sources. Paper-based patient monitoring systems present the greatest challenges at large sites with more than 500 people on treatment. In order to support adherence, clinicians and counsellors must have access to real time information on patient status. However medical records are often not available for review and data clerks may use different alphabetical or numerical systems making it difficult to identify patients who default from ART clinics.

Description:
Vryheid Hospital in Kwa-Zulu Natal (KZN) province, with 480 patients currently on ART, uses paper-based patient tracking systems. The hospital encountered difficulties identifying defaulters from ART clinics using a filing system by date of birth. Elizabeth Glaser Pediatric AIDS Foundation (EGPFA) assisted in implementing a unique filing system in June 2007. The system groups files according to date of entry into the ART clinic (4 clinic days a week multiplied by 4 weeks every month). On arrival patients present a card marked by grouping which is used to retrieve the patients file. Files of patient who fail to show up for any clinic day are set aside and given to TB tracing team after 7 days for tracking over the phone or in person. Overall, patient waiting time in the ART clinic was shortened from over 1 hour to less than 30 minutes; defaulters were more easily identified and tracing has improved. Attending medical staff can locate a patient's file in a matter of minutes.

Lessons learned:
While electronic patient level databases are useful in some settings in paper-based patient tracking systems can be effective in tracking defaulters in resource-limited settings.

Next steps:
Departments of health are encouraged to enhance simplified patient filing systems to facilitate easier patient tracking.

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Improving management of HIV prevention programs through strengthened monitoring and evaluation in Botswana

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Issues:
CAP Botswana provides multi-year funding and technical assistance to NGOs in Botswana implementing HIV prevention programs. Throughout Year 1 of implementation key gaps identified included ineffectiveness in target setting resulting in inconsistent performance, poor quality data reported (accuracy, timeliness), limited understanding of M&E resulting in limited ability to account for data or interventions implemented.

Description:
Key areas of support to address the various M&E issues include training and technical assistance, target setting exercises integrated during program design, standardization of intervention delivery tools and methods, implementation of monthly internal data quality checklists (completeness, accuracy, consistency), and quarterly performance review meetings with organizational management to report progress of projects.

Lessons learned:
Accuracy of reporting has improved from 81% in Year 1 to 95% in Year 2. Timeliness of reporting has improved from 57% in Year 1 to 72% in Year 2. Currently 66% of organizations exceeded or met targets set for QII. Other organizations have projected improvement in reaching targets based on QII activities planned. These key achievements in only one quarter are the first steps to increased NGO accountability to their donors and target communities.

Next steps:
M&E strengthening activities, as outlined, are the building blocks to increased accountability and improved operations and performance of NGOs. Other areas for replication include design of assessment tools to monitor quality of HIV prevention services delivered and financial reporting similar to the DQ checklist. These efforts aim to increase delivery and management of quality HIV programming and track resource use for maximized cost efficiency. Such accomplishments by NGOs will serve as a model for leadership and accountability for other NGOs in Botswana.

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Harnessing real-time electronic data to predict readmission risk in hospitalized HIV patients: a new automated risk stratification model

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Background:
Readmission after hospitalization is common among HIV patients, with rates reported as high as 20% within 14 days of discharge. Readmissions are costly, time-consuming, and result in poorer outcome. This study presents a predictive model for readmission risk in hospitalized HIV patients.

Method:
A preliminary model for 30 day readmission was derived and validated from Electronic Medical Record (EMR) data of HIV admissions at a large urban medical center between 2006 and 2008. The primary outcome was readmission within 30 days to any of 136 area hospitals. Data was retrospectively collected and only included if present within the first 48 hours.

Results:
Bootstrapting with multivariable logistic regression was employed. Model fit, calibration, and discrimination were assessed with the C statistic, Hosmer-Lemeshow test, and integrated discrimination index (IDI).

Results:
2,540 index patients were admitted with HIV or AIDS. Average age was 42 (73%) were male, and average CD4 count was 186 (25%) patients were re-hospitalized within 30 days of discharge. The final multivariable readmission model included: CD4+ > 30 (OR 1.37), age gap > 20 (OR 3.10), COX-2 (OR 1.46), creatinine > 2 (OR 1.57), hematocrit < 28 (OR 1.78), total lymphocyte count < 0.62 (OR 1.49), ALT/AST > 35 (OR 1.36), history of mental illness (OR 1.46), Medicaid insurance (OR 1.53), < 1 ED visits in prior year (OR 1.04), > 1 admission in prior 6 months (OR 1.29), and elective admission status (OR 4.03) (p < 0.05 for all). The model demonstrated good discrimination (C statistic 0.73) and calibration. Predicted risk of 30 day readmission ranged from 5% (no risk factors) to 97% (9 risk factors).

Conclusions: An automated model using EMR data present within the first 48 hours of admission performed well in predicting the real-time risk of re-hospitalization within 30 days. Such a model may enable a targeted intervention for hospitalized HIV patients at greatest risk.

MOPDE105

Innovative expedited results system (ERS) greatly improves quality of Mozambique early infant diagnosis program

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Issues:
In Mozambique, limited sample referral logistics, laboratory capacity and reduced numbers of skilled health care workers led to long turn around times for critical Early Infant HIV Infant Diagnosis (EID) results, significantly delaying treatment initiation, and ultimately contributing unnecessarily to child mortality.

Description:
An innovative system was designed to allow laboratories to send test results directly to almost 300 health centers across the country. The Expedited Results System (ERS), which utilizes GPSR wireless technology and simple, inexpensive printers, vastly reduces the time and cost of transporting results from the laboratory to the clinic. It is managed centrally by an administr- ative assistant, reducing the workload for skilled laboratory technicians. Confidentiality and the delivery of results are guaranteed through automated monitoring and evaluation software.

Lessons learned: Preliminary results from the first phase of implementation in the urban setting of greater Maputo City showed a decrease in the average return time of completed EID results to patients from 85 to 23 days when using the ERS. The cost of transmitting each result using GPSR technology ($0.0002) is insignificant, even at high volume. As the evaluated health centers lie within a 20km radius of the reference laboratory and have relatively good logistics support, it is expected that the effect of the ERS will be even more dramatic for less-resourced and more distant health centers.

Next steps: The ERS was designed, piloted, and rolled out on a national basis in Mozambique in less than 10 months as the result of collaboration between government, partners, and the private sector. While initially created to ac- cept EID results, other tests such as CD4 and tuberculosis are currently being integrated. This approach, now developed and tested, can be easily and rapidly transferred to other countries. A complete description of the system, including costs and procedures for implementation, will be shared.

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Innovative Models of HIV Care

MOPDE201

The missing link: non-governmental organisations and district level HIV/AIDS programme coordination in Zambia

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Background:
Funding from three global HIV/AIDS initiatives (GHIs) - Global Fund, PEPFAR and the World Bank - has enabled rapid scale-up of HIV/AIDS services in Zambia. The National AIDS Council coordinates the national multisectoral response and delegates district level responsibility to District AIDS Task Forces (DATFs) and District AIDS Coordination Advisors (DACAs). We analysed the extent to which non-governmental organisations (NGOs) have contributed to or detracted from district level HIV/AID coordination.

Methods: Qualitative interviews with 53 key informants (government, NGOs and international agencies) were taped recorded in urban and rural district in 2007 and 2008. Transcripts were analysed by two researchers using content and thematic analysis.

Results: A total of 25 district registration of NGOs increased between 2005 and 2008, though mainly among those funded by The Global Fund and World Bank. Such NGOs improved district coordination through funding DATF meetings, information sharing and promoting client referrals between government and NGO service providers.
MOPDE203
Public private partnerships in ART patient management - a down referral model in South Africa

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Issues: Private General Practitioners (GPs) are often overlooked in HIV service provision, while the growing number of HIV-positive women requiring care and treatment has overstrapped public sector resources in many sub-Saharan African countries. To expand accessibility of HIV care and treatment in the North West Province, South Africa, BroadReach Healthcare and the North West Department of Health (NW DoH) introduced a public-private partnership that engages GPs to meet demand for HIV services.

Description: Developed in 2005, this model between the private and public sectors to expand access and capacity to HIV services. Patients are initiated on ART at Tshapingo Hospital Wellness Centre, where they are stabilized and down-referred to a local GP for ongoing routine HIV care. Leveraging PEPFAR funds, BroadReach supports the cost of government-accredited training, mentorship, and disease management services. The NW DoH provides all ART and clinical monitoring tests. If patients acquire opportunistic infections or become pregnant, they are temporarily up-referred back to Tshapingo Wellness Centre.

Between November 2005 and December 2009, 1695 patients were down-referred to GPs. Of these, 17.1% transferred out of the program and back to the public hospital for management of pregnancy, TB coinfection or complications. Of those transferred, 70% were initiated on ART. Seventeen percent (17.1%) transferred out of the program to another site. Among these, an average of 95% of patients had an undetectable viral load. After 48 months, an average of 94% were suppressed.

Lessons learned: Public-private partnerships are a viable and rapid mechanism to relieve public sector capacity constraints. Political support, government leadership, aligned goals and clear agreements for roles and responsibilities among all partners are critical for implementation success. The PFP model has achieved superior outcomes (follow up and viral load suppression) to public or private models alone.

Next steps: To scale up the down referral program to other areas of South Africa.

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MOPDE204
Mainstreaming the prevention of parent-to-child transmission (PPTCT) program with the national rural health mission (NRHM): experiences from Southern India

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Issues: Approximately 1.2 million pregnancies occur annually in Karnataka state, south India, and the estimated HIV-positivity rate in the general population in the state is 0.86%. Since its inception, the PPTCT program in Karnataka has worked as a vertical program implemented by Karnataka State AIDS Prevention Society (KSAPS). PPTCT activities were therefore not seen as part of the existing health system, and general health resources were not tapped. This resulted in a slow testing and Turner for pregnant women. In March 2008, a plan was drafted to integrate the PPTCT program with the NRHM.

Description: An inter-departmental government directive was issued on PPTCT-NRHM integration in 2008. Auxiliary Nurse Midwives (ANMs; grass-root level workers under NRHM) were given responsibilities to implement the PPTCT program. Reporting was built into the regular health department management information system. Government District AIDS Prevention and Control Unit Officers, and Reproductive and Child Health Officers, monitored and assessed the implementation of PPTCT-NRHM in district level. Line-listings of HIV-positive pregnant women were made available to all health care providers on a “shared confidentiality” basis. Uptake of testing improved from 242,021 pregnant women tested in 2007 to 750,458 in 2009. Mother-baby pair cover-age increased from 40% (2007) to 61% (2009). Approximately 9,500 ANMs and 2000 primary care medical officers form the program backbone.

Lessons learned: Integration was accomplished with the commitment and involvement of stakeholders from the highest levels of government to grass-root level workers, with clear-cut roles and responsibilities. Waste and duplication of resources was avoided, which helped bring the program to scale.

Next steps: Two years’ experience has shown that mainstreaming can achieve the scale-up of PPTCT services, by utilizing the strengths of the existing health systems to cater to the needs of pregnant women. This model has now been recommended for national replication.

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MOPDE205
Increasing access to antiretroviral therapy (ART): implementing a system of down-referral of ART-stable patients to PHCs in Ekurhuleni district, Gauteng province

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Issues: South Africa has the largest antiretroviral therapy (ART) programme in the world with 700,500 people on treatment in December 2008 (UNAIDS 2009). ART initiation sites have largely been located in hospitals and community health centres, which are secondary level of care facilities. In Ekurhuleni district, with antenatal HIV prevalence of 31.5% in 2008, only five sites were initiating patients on ART. The increasing load of new patients for ART and existing patients led to over-crowded clinics and compromised quality of care.

Description: Since August 2008 EGPFA has provided several training sessions and ongoing coaching to 80 Ekurhuleni district health workers to down-refer stable patients on ART to the primary health clinics (PHCs) for follow-up care. Twenty PHC sites were identified in April 2009. PHCs are usually located in close proximity to the patient. The down-referral (DR) process involves assessing PHCs for readiness to receive ART patients; training various cadres of health workers on clinical management of HIV; selecting eligible patients; preparing patient files and relevant forms; pre-packing of drugs and effective communication with PHCs.

Lessons learned: DR increases the capacity of initiation sites to enrol new ART-eligible patients by off-loading stable patients to PHCs. Patient initiation on ART increased by 55% in one quarter of 2009 compared to the same quarter in 2008 prior to implementation of DR. DR increases patient access to life-saving medication due to proximity; reduced loss to follow-up, from above 10% to less than 5% in 2009; all trained PHC nurses gained confidence in managing ART, improved quality of care and from five initiation sites twenty PHC sites are ready to provide ART.

Next steps: DR of patients to PHC sites has increased access to ART in the district. The plan is to have all PHC sites manage stable ART patients through the down-referral process.

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MOPDE206
Primary healthcare facilities deliver more effective antiretroviral therapy: an evaluation in four provinces in South Africa

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Introduction: Studies of limited size have reported conflicting results of the effectiveness of antiretroviral therapy (ART) provision between primary healthcare (PHC) facilities and hospitals in low-income settings. We compared adult ART outcomes between three facility levels in four South African provinces.

Methods: A retrospective cohort study was performed using routine electronic data of ART-naïve adults from 49 PHC facilities, eight district hospitals and three regional hospitals, representing almost 10% of South African public-sector ART patients enrolled between 2004-2007. Kaplan-Meier estimates, multivariable competing-risks Cox regression and generalised estimating equation population-averaged models were used to compare death, loss to follow-up (LTFU), virological suppression (VS) and CD4 cell increases between levels of care adjusting for baseline variables.

Results: 29,203 adults (68.1% women) having 29,297 person-years of observation were included. Baseline CD4 cell counts were similar between facility levels, however patients enrolling at PHC facilities had more advanced clinical stages. After 36 months of ART, retention-in-care and mortality were most favourable at PHC facilities, being 76.3% (95% CI: 74.6-77.8) and 0.71 (95% CI: 0.55-0.90) respectively compared to PHC sites. District and regional hospital patients had independently elevated at district hospitals (aHR 1.60; 95% CI: 1.30-1.99) compared to PHC sites. District and regional hospital patients had in-dependently reduced probabilities of VS at any time-point on treatment, aHR 0.71 (95% CI: 0.55-0.90) and 0.66 (95% CI: 0.58-0.75) respectively.

Conclusion: Patients treated at PHC facilities had superior longitudinal outcomes. Wide-scale ART delivery at the primary level of care is a solution to reaching the vast number of NVP. Thus, private pharmaceutical companies were approached by a public sector program to test the effectiveness of using their medical representatives to disseminate information to NFP.

MOPDE302
Improving STI counseling services of non-formal providers through academic detailing by medical representatives

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Background: As in many developing countries, health provision by non-formal providers (NFP) in Bangladesh is increasing. While training can improve their practices, traditional training may not be feasible in reaching the vast number of NFP. Thus, private pharmaceutical companies were approached by a public sector program to test the effectiveness of using their medical representatives to disseminate information to NFP.

Methods: An intervention was developed that included training medical representatives to disseminate guidelines on STI counseling to NFP throughout Bangladesh. To test the feasibility and impact of this approach, we conducted 67 mystery client visits to compare the counseling provided by NFP in intervention areas where medical representatives disseminated the guidelines and counseling provided in areas where the intervention was not implemented.

Results: Mystery clients in the intervention area were more likely to be treated in a friendly manner (83%) than those in the control area (45%). Over 58% of mystery clients in the intervention area received at least one message included in the guidelines on which the medical representatives were trained. No mystery clients in the control area were told to use condoms while the STI lasts compared to 44% in the intervention area. Likewise, more than twice as many clients in the intervention area were advised not to visit sex workers.

Conclusion: NFP are a feasible mechanism for disseminating information to NFPs in Bangladesh. Private-sector companies provide a potential avenue for reaching the vast number of NFPs with basic information that can share with their clients. The immediate improvements seen in this study suggest the strong potential of academic detailing as a training tool for non-formal providers.

MOPDE303
Maximizing utilization of existing staff time at two HIV treatment sites in Jamaica

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Background: As the number of HIV-positive patients in care and treatment expands, identifying opportunities to maximize the utilization of existing human and financial resources while also maintaining high quality care is critical.

At two hospitals in the western region of Jamaica, the long wait time for physicians was identified as a significant bottleneck.

Methods: Randomly selected patients were followed each clinic day to collect data on wait times and time spent with clinical staff. Over six weeks, 53% observations of patient visits with physicians and 366 observations of patient visits with nurses were collected. Two visit schedules for HIV patients were modeled - one reflecting the current practice in the clinics where all HIV patients return every month to see the physician, and the second created as a hypothetical scenario where patients on treatment for more than 6 months would return every 3 months for clinical follow-up with a physician and for patients not treated this approach.

Results: On average, patients wait 3 hours in the clinic for an 11 minute visit with a physician. Shifting from the current visit schedule to the revised schedule would give physicians an additional 2 hours, 28 minutes each clinic day (a 19% increase in physician time) (Figure 1).

[Figure 1. Physician and Nurse Time Saved]
Discussions
Oral Poster
20 July
Author
P. Sebanja

Issues:
MOPDE304
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To reduce financial stress on devoted service providers
TASO Uganda experience
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Issues: TASO serves over 90,000 HIV-positive clients and has around 1,000 staff. In a resource limited setting, staff benefits are low and employees look for opportunities to earn extra income. Employees in HIV/AIDS care agencies find it difficult to engage in other income generating activities because of the tight work schedules. They end up living with financial stress that eventually leads to reduced morale and ineffectiveness at work. Employees often require a salary for advances; making their monthly take-home pay very little.

Description: Substitution to this scheme is voluntary. Whoever subscribes to the scheme is obliged to save a portion of their monthly salary. The money is pooled together and kept in a bank account and managed by an elected executive committee of 5 members. Employees are entitled to access loans from the scheme at a low interest rate. The loan is recoverable in small instalments over 24 months. Interest that accrues from the loans is shared as dividends among members.

Lessons learned: The scheme has evolved from a small loan scheme into a savings and credit scheme. Members are obliged to save a portion of their monthly salary. The money is pooled together on a bank account and managed by an elected executive committee of 5 members. Members are entitled to access loans from the scheme at a low interest rate. The loan is recoverable in small instalments over 24 months. Interest that accrues from the loans is shared as dividends among members.

Next steps: A well managed savings and credit scheme has the potential to reduce financial stress among service providers and enhance their motivation and retention. Human resource managers in HIV/AIDS programs should consider utilizing similar schemes as a complimentary strategy for improving staff motivation and retention.

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MOPDE305
The role of treatment supporters in TB management
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Issues: Non-adherence to TB treatment is receiving considerable attention among HIV/AIDS implementers. Whereas the Ministry of Health developed different strategies to ensure adherence to TB treatment, including TB DOTs, and increased availability of drugs, there is lack of network systems among patients, their families, and health institutions to tackle other challenges that impact on adherence. Most health centers dispense and do not link up with the community.

Description: The TB savings and credit scheme was established in 1992. Since then 33 CHWs were identified and trained in 2005. Between 2006 and 2007, 360 patients were treated for TB and overall, 73% adhered to the treatment. During the same period, 238 patients were co-infected with HIV/TB. By the end of 2005, default rates averaged at 25%. This reduced to 11% in 2007 among patients visited by Ex-TB supports. CHWs have reached a total of 120 TB patients in their homes.

Next steps: The success of TB treatment depended on the linkages between the clinic, communities, families, and CHWs. TB treatment should look beyond the DOTS approach, to more sustainable methods, like expert treatment supporters (CHWs).

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MOPDF101
Community Action Making a Difference
MOPDF102
Drug users defend patients’ rights in Kyrgyzstan
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Issues: Injection drug use is widespread in Kyrgyzstan - official statistics count 26,000 IDUs. Injection drug use is also the most common route of HIV transmission in the country, accounting for 74% cases. Because of intense stigma, many IDUs face violations of their rights by health care providers.

Description: Aman+ is an organization started and run by former and current IDUs. We conducted a community monitoring study to bring to light these abuses toward drug users. In our study we tracked the quality and timeliness of medical service provision and the consequences of inadequate medical service delivery, interruption and discontinuation of treatment, and cases of lethal outcome. We found that medical staff failed to follow elementary standards of ethics when providing medical care to drug users. They also lacked knowledge of existing harm reduction and rehabilitation programs and could not provide referrals. There was no system for reporting abuses and drug users lacked legal education and were unaware of their rights. These factors led IDUs to avoid medical services. We called on the medical establishment to stop violations and provide adequate access to healthcare services for IDUs.

Lessons learned: We presented the results of our research to government ministries, which opened doors for future collaboration. We also launched a series of trainings for medical staff on how to treat and sensitize doctors and nurses to serving drug users. In 2009, we - the community of IDUs - trained over 100 health staff of various medical institutions around Bishkek. Next steps: We are now collecting data on the impact of our efforts. To reduce the spread of HIV in our country, IDUs require access to basic health services. Positive interaction between health workers and IDUs is the best way to do this and we will be calling on our country’s ministries to foster such activities.

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MOPDF103
Commitment desk on young people SRHR underlining HIV and AIDS in Asia and the Pacific
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Issues: Many promises that have been committed need to be followed up. Young people need an opportunity and space to expressing their voice effectively and efficiently, which any major conference in the region could support the young people to get international attention.

Description: At the conference we assign volunteer who will follow up the commitments and develop a follow up kit for them.

Lessons learned: We aims to increase the level of accountability by policy-makers/leaders in showing commitment to young people needs and issues, followed through on real advocacy in action, by monitoring and coordinating the commitments afterwards and linking regional young people movement with national policymakers. The commitment desk is succeed in mobilize stakeholders about the importance of youth involvement within the region and national level. But in next commitment desk we have to be more focused on the quality of the commitment. We should create a better stakeholder mapping, and already appointed priorize issues to the majority.

Next steps: The commitments made will also provide opportunities and entry points for future advocacy, beyond the conference, as the commitments can be used for leverage to obtain other action.

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MOPDF104
TRANSferring TECHNOLOGIES - strengthening the travestite movement through advocacy strategies and monitoring of public policies for HIV prevention
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Issue: The National STD/AIDS Program from the Brazilian Ministry of Health launched in 2007 the “Brazilian Plan to Combat AIDS and STDs among Gays, MSH and Transvestites”. This Plan considers two Affirmative Agendas: one for gay and MSM and other for transvestites. The Plan aims to define the national commitment desk is succeed in mobilize stakeholders about the importance of youth involvement within the region and national level. But in next commitment desk we have to be more focused on the quality of the commitment. We should create a better stakeholder mapping, and already appointed priorize issues to the majority.

Next steps: The commitments made will also provide opportunities and entry points for future advocacy, beyond the conference, as the commitments can be used for leverage to obtain other action.

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leaders to define a monitoring plan for the Affirmative Agenda for Transves- tite and a publication to highlight the possible advancements and results thus far achieved to allow the wider dissemination of the experience in the Latin America region.

Lessons learned: The M&E workshop held with 13 transvestite leaders from 12 states in Brazil prioritized interactive group work and discussion ended in the definition of a Monitoring Plan for the Brazilian National Plan. The M&E Plan included a total of 21 indicators. The primary areas of focus for monitor- ing were positive prevention, Transfobia, prevention in prison, and research initiatives.

Next steps: While Brazil is in the process of decentralizing their health sys- tem, efforts continue to be made towards larger scale social monitoring that involves stakeholders that rely on national policies to make changes in their ways of reporting epidemiological data and general policies. Therefore, it is key that the transvestite movement continue not only meeting with government officials locally, but also participating in political spaces to advocate for the implementation of public policies targeted to the community.

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MOPDF105
Empowering and supporting communities for TB/HIV advocacy
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Issue: TB is the leading cause of death and causes nearly a quarter of the deaths amongst PLWH. Communities are vital partners for policy makers and implementers to improve TB prevention, early case detection and treatment coverage. Communities are required to support HIV community advocates to fully integrate TB into their advocacy agendas, Treatment Action Group (TAG) and the International Community of Women with HIV - Eastern Africa (ICW) entered into partnership since 2007 to support the integration of TB into community-based HIV activism in Africa.

Description: The TAG/ICW model involves the following 5 components: selection of partner organizations that TAG/ICW would support, advocacy work- shops, support in implementing their advocacy plans, increasing visibility of the activists’ leadership their advocacy accomplishments outcomes of their advocacy. This model evaluation to refine the model.

Lessons learned: TAG/ICW have built the capacity of 49 community activists throughout Africa.

Key project outcomes: - Increased activists’ knowledge of TB/HIV science and policy so that they not only understood the diseases but also had credibility when working with national TB and HIV programs.
- With clear plans and knowledge advocates were able to influence decision- makers to undertake action benefiting people affected/affected by TB/HIV.
- Some TB/HIV advocacy outcomes are as follows:
- Catalyzed the formation of Stop TB Partnership in Nigeria that includes activ- ists from people infected/affected with HIV and TB.
- TB treatment literate activists in Swaziland raised the visibility and helped resolve a TB drug stock out.
- Activists in Malawi integrated a symptom screen for TB case finding in their HIV support group.
- Kenyan, Ugandan, and Zambian activists developed TB/HIV shadow reports as part of the UNAIDS review for 2010.

Next steps: Global policies and research efforts will be targeted to ensure that they are creating an enabling environment to achieve universal access to TB care and treatment.

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MOPDF106
Guidance for police investigating allegations of criminal transmission
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Issues: Since 2004 people with HIV in England and Wales have been liable for prosecution should they recklessly or intentionally transmit HIV to some- one else. As a result of the HIV sector engaging with prosecution authorities, prosecution guidance was agreed in 2008 which has significantly reduced the number of cases getting to trial. However, a review of past cases undertaken by Terrence Higgins Trust revealed too many unnecessary, poorly informed police investigations of people with HIV which cause trauma and on occasion undermine confidentiality.

Description: The Association of Chief Police Officers (ACPO) is responsible for agreeing Guidance for police forces. At the request of the National AIDS Trust (NAT), ACPO agreed to establish a working group of police officers who in liaison with HIV community stakeholders would draft, for ACPO agreement, one guidance for police investigations. NAT was the sector who organised the on-going guidance and the guidance was agreed and launched in Spring 2010.

Lessons learned: The guidance is an internet resource available to all investig- ating officers via the police training website. Flowcharts set out investigative steps which ensure consistency with prosecution guidance and prevent investigations which have no likelihood of resulting in a charge. In- formation includes on how to focus, record and communicate to police services for PLWH meet problems in accessing financial services sector based on insurability. Discrimination also affects those with HIV as well as those living with TB.

Lessons learned: The Dutch Association of Insurers decided in June 2009 to rephrase the discriminatory and stigmatizing questions about HIV/AIDS in the Applicant Health Declaration. They feel stigmatized and discriminated by questions on if a person has a secret life based on prejudices on HIV/AIDS.

Description: A mathematical model for the mortality probability of PLWH, compared to population mortality is developed in 2008 by the HIV Monitor- ing Foundation. Occurrence or absence of a CDC-B event within 24 weeks of the diagnosis of HIV have significant impact on the death of persons with HIV. Based on these parameters the HIV Working Group of The Dutch Association of Insurers recognize HIV as an insurable chronic medical condition (Report HIV Insurability Expended, June 2009).

Lessons learned: The Dutch Association of Insurers decided in June 2009 to rephrase the discriminatory and stigmatizing questions about HIV/AIDS in the Applicant Health Declaration to include PLWH in their acceptance policy. Also, to regularly update research findings so competitive net premiums can be calculated annually. Their decisions have been taken in close consultation with the Dutch HIV Association to include their experiences based on the IGP Principle. The Dutch Insurers evaluated the process as a very successful ap- proach.

Next steps: Recommendations of the Report HIV Insurability Expended must be implemented on all relevant levels. PLWHA and relevant professional groups, including insurers, medical consultants and brokers, must be informed that HIV is an insurable chronic medical condition. The successful developments in acceptance conditions on life policies for PLWH in the Netherlands should be adopted in a global perspective by other Insurers and should be added on the International HIV/AIDS advocacy agenda on Universal access to financial services for PLWH.

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MOPDF107
The Dutch Association of Insurers recognize HIV as insurable chronic medical condition
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Dutch HIV Association, Social and legal Advocacy, Amsterdam, Netherlands

Issues: PLWH meet problems in accessing financial services sector based on insurability. Discrimination also affects those with HIV as well as those living with TB.

Description: The guidance was agreed and launched in Spring 2010.

Next steps: Liaison with HIV community representatives would draft, for ACPO agreement, one guidance for police investigations. NAT was the sector who organised the guidance and the guidance was agreed and launched in Spring 2010.

Lessons learned: The guidance was agreed in 2008 which has significantly reduced the number of cases getting to trial. However, a review of past cases undertaken by Terrence Higgins Trust revealed too many unnecessary, poorly informed police investigations of people with HIV which cause trauma and on occasion undermine confidentiality.

Lessons learned: The guidance is an internet resource available to all investig- ating officers via the police training website. Flowcharts set out investigative steps which ensure consistency with prosecution guidance and prevent investigations which have no likelihood of resulting in a charge. In- formation includes on how to focus, record and communicate to police services for PLWH meet problems in accessing financial services sector based on insurability. Discrimination also affects those with HIV as well as those living with TB.

Lessons learned: The Dutch Association of Insurers decided in June 2009 to rephrase the discriminatory and stigmatizing questions about HIV/AIDS in the Applicant Health Declaration. They feel stigmatized and discriminated by questions on if a person has a secret life based on prejudices on HIV/AIDS.

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Lessons learned: The Dutch Association of Insurers decided in June 2009 to rephrase the discriminatory and stigmatizing questions about HIV/AIDS in the Applicant Health Declaration to include PLWH in their acceptance policy. Also, to regularly update research findings so competitive net premiums can be calculated annually. Their decisions have been taken in close consultation with the Dutch HIV Association to include their experiences based on the IGP Principle. The Dutch Insurers evaluated the process as a very successful ap- proach.

Next steps: Recommendations of the Report HIV Insurability Expended must be implemented on all relevant levels. PLWHA and relevant professional groups, including insurers, medical consultants and brokers, must be informed that HIV is an insurable chronic medical condition. The successful developments in acceptance conditions on life policies for PLWH in the Netherlands should be adopted in a global perspective by other Insurers and should be added on the International HIV/AIDS advocacy agenda on Universal access to financial services for PLWH.

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MOPDF2 Access to Generics: TRIPS Flexibilities and Beyond

MOPDF202
Examining pharmaceutical patents from a public health perspective: the role of patent offices
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The TRIPS Agreement balances the need to incentivize innovations through the granting of patents on the one hand with the goal of spreading the ben- efits of that innovation through, for instance, access to essential medicines on the other. To ensure that the benefits of innovation can be assimilated by all WTO Member States, important flexibilities were introduced into the TRIPS Agreement. These include Article 27 which allows WTO members to interpret the three criteria of patentability (novelty, inventive step, and industrial appli- cation). There is growing evidence pointing to the proliferation of patents over minor variants of existing products both in developed and developing coun- tries. A large number of granted patents cover minor modifications of older existing drugs or are granted because of new uses for existing medicines.

Therefore, while the number of approved new-developed chemical entities has lowered significantly in recent years, the number of patents being granted because of simple changes in the chemical formulation of existing pharma- ceuticals, has increased significantly, leading to the exclusion of generic com- petition in some instances. This, in turn, restricts the availability of affordable medicines and constitutes an important obstacle for the realization of the right to health. UNDP in partnership with the WHO, have been conducting training sessions in developing countries with patent offices which examine pharmaceu- tical patent applications, with the aim of highlighting the importance of examining pharmaceutical patents from a public health perspective and using the interpretive space provided by Article 27 of the TRIPS Agreement. To assist the patent examiners from 7 African countries, 9 Latin American and Caribbean countries as well as 6 Arab states have been involved in the training. The use of this TRIPS flexibility by patent examiners, particularly those in countries with significant generic manufacturing industries could play an important role in stimulating generic competition for ARVs.

MOPDF203
Access to ARVs in Sub-Saharan Africa (SSA) and Eastern Europe Implications of the patents amendment act in India
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Abstract driven session to be considered as bridging session.

A panel discussion (90 minutes) will include views from civil society in Germa- ny, South Africa and Ukraine and pharmaceutical companies in US and India. The audience will be informed about HIV/ART. Global access treatment access campaigns have shown that through free generic markets ART-prices are reduced significantly, which has greatly improved access to drugs for first line treatment. However, for improved first line and second line
MOPDF204

One-licence solution for a one-hit wonder: civil society's campaign to reform Canada’s access to medicines regime and create a positive global model of using TRIPS flexibility of compulsory licensing to export lower-cost, generic pharmaceuticals

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Issues:
In 2004, Canada implemented the 2003 WTO Decision on compulsory licensing of patented pharmaceuticals to facilitate exportation of generics to countries in need. In 2007, the first compulsory licence (CL) was issued under “Canada’s Access to Medicines Regime” (CAMR), under which 15.6 million tablets of fixed-dose combination (FOC) ARV (AZT+3TC+3HPV) were supplied to Rwanda at internationally competitive price over 2008-09. This is the only use of the 2003 WTO decision to date, but there is little chance CAMR will be used again, absent reform.

Description:
CAMR should be streamlined to reflect needs of developing countries and generic producers. Eliminate the requirement for a separate CL for each order of a medicine, which is limited to a pre-determined rate CL for each order of a medicine, which is limited to a pre-determined amount of medicine. Instead, enact a “one-licence solution” that grants, via a single CL, the legal authorization to generic manufacturer to produce any patented pharmaceutical product solely for export to any developing country covered by the legislation. We drafted proposed amendments to this effect, worked with Parliamentarians to secure introduction of bills to reform CAMR and secured public commitment from country’s largest generic manufacturer to manufacture a paediatric FOC ARV for export under a reformed CAMR. NGO coalition campaigned for reforms using media advocacy, public education (e.g., street action, social networking), lobbying (through petitions, letters/postcards/emails, individual meetings, committee hearings), marshalling support from independent JP experts, UN agencies and prominent public figures. Lessons learned:
Chief barriers to CAMR reform include misinformation by pharma and opponent Parliamentarians about the capacity of developing countries to absorb the distribution of medicines. WTO and donor patent law and claims about impact on pharmaceutical R&D. Reformed CAMR will lead to greater ARV access, including for children, and could create global model for legislation elsewhere.

Next steps:
Civil society advocacy continues on bill before Parliament. Presenting author email: relloitt@aidslaw.ca

MOPDF205

Implementation of TRIPS agreement and DR-CAFTA in the national legislation of six countries regarding the consequences for access to medicines

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Background:
Until the World Trade Organization (WTO) was founded in 1995, developing countries had considerable leeway to formulate their own set of intellectual property rights (IPR) considering national priorities. With the adoption of the TRIPS Agreement as a constitutive part of WTO rules these countries were confronted with the obligation to adapt their national legislation to the new international standards. In the following years several countries accepted regional or bilateral trade agreements which aggravated the WTO requirements. Up to now there is a lack of systematic information on the development in India has to implement the whole of TRIPS (including product patent protection) into their national law in 2005. The introduction of additional patents on ARVs reduced India’s capacity to produce and export generic versions of patented ARVs. The session will:
• examine to which extent access to ART is threatened in SSA and middle income countries (MICs),
• focus on sharing experiences from the Global South and Eastern Europe,
• use the Global South and Eastern Europe to improve the WTO and domestic system.

Lessons learnt:
Civil Society plays an important role in advocating for access to generic production of ARVs (TAC, Action against AIDs Germany). New ways need to be found to guarantee access also to improved first and second line treatment. Public pressure and dialogue between the pharmaceutical industry and governments can contribute to improved access in SSA and Eastern Europe.

Next steps:
Policy recommendations regarding new incentives for follow-up will be discussed as well as possibilities for ensuring new drug development, e.g. patent-pool.

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MOPDF206

Strengthening national responses to AIDS through south-to-south technological multilateral initiatives: the experience of the Technological Network on HIV/AIDS

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Issues:
The development of comprehensive and sustainable national responses to AIDS epidemic remains a challenge for the low and middle income countries (LMIC). These challenges include lack of implementation capacity, technical and financial resources and skilled decision-makers and health staff.

Description:
The Technological Network on HIV/AIDS (www.aidsrnet.org) was established in 2004 and is a joint initiative amongst the Republics of Argentina, Brazil, China, Cuba, Nigeria, Russia, Ukraine and the Kingdom of Thailand aiming to promote multilateral South-to-South technical cooperation initiatives to increase access to medicines and other inputs for the diagnosis, prevention and treatment of HIV/AIDS. The Network received a two-million dollar grant from the Ford Foundation and is currently working on two main areas of work: collaborative efforts to improve the production of antiretroviral medicines and the implementation of panels for characterizing the patterns of genotypic and phenotypic resistance of HIV-1 subtypes. The implementation of the multilateral projects includes country member’s technical staff as well as experts working on an advisory basis through a horizontal south-to-south process of technology transfer and partnerships involving AIDS programs, private and public institutions at national level. Lessons learned:
South-to-south horizontal technological multilateral initiatives amongst LMIC represented a complex technical and political agenda that includes several national and international stakeholders, heterogeneity on policy implementation and the necessity of harmonizing regulatory and manufacturing practices. Linking supranational and in-country technical capacities represented feasible mechanisms to enhance LMIC capacity of policy implementation on HIV/AIDS.

Next steps:
Member countries are currently working on promoting technology transfer for producing new AIDS medicines and laboratory resources. The optimization of technical resources and strengthening the technical capacity of the national responses amongst participant countries represent the second phase of the Network.

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MOPDFX1

Sexuality Education and its Role in HIV Programmes

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Issues:
Few young people receive anything approaching adequate preparation for adult sexual life. Good quality sexuality education provides young people with age-appropriate, culturally relevant and scientifically accurate information together with opportunities to explore attitudes and values and to practice the skills required for making and acting upon informed decisions about their sexual lives. Schools provide an important opportunity to reach large numbers of young people with sexuality education, as well as an appropriate structure within which to develop new content and materials.

Description:
Published by UNESCO in partnership with UNAIDS, UNICEF, UNFPA and WHO in December 2009, the International Technical Guidance on Sexuality Education (Vol I and II) sets new international benchmarks and provides advice for developers and implementers of school-based sexuality education. This paper provides a urgent needed benchmark and is based on a rigorous review of evidence on the effects of sexuality education programmes, the publication is a key resource for education and health sector decision-makers and professionals. Volume I focuses on the rationale for sexuality education and provides sound technical advice on characteristics of effective programmes. A companion document (Volume II) focuses on the teaching and learning objectives to be covered in a ‘basic minimum package’ on sexuality education for children
MOPDX102

The implications of life skills training on sexual behavior and attitudes towards cross generational sex among pre-university young women in Uganda

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Issues: In Uganda, 10% of women aged 15-19 have engaged in cross-generational sex (CGS)—sex with a man at least 10 years their senior—in the past 12 months. This is a major determinant of the rapid rise in HIV prevalence among young women versus young men. The differences in attitudes and behaviors between sexual partners has been identified as key drivers of the HIV epidemic in Sub-Saharan Africa, there are still many uncertainties regarding how to define the phenomenon. For this reason, this paper aims to contribute to the discussion by documenting the experiences of forty students (20 females, 20 males) in the camps (n=174).

Description: To combat these high-risk CGS relationships, PACE has conducted Life Skills Camps (LSC) since 2007 to build HIV risk awareness among young people from 5 to 18+ years of age and includes a bibliography of technical level, it also highlights key characteristics for successful program- ming and implementation.

Lessons learned: Evaluations demonstrated statistically significant positive change in knowledge, perceptions, attitude, and reported behaviors related to CGS. In the respective assessment periods, accurate knowledge of CGS was 75%, 93% and 98% (p<0.001). The proportion of girls who perceived negative consequences of CGS increased from 87% at pre-test to 96% at six-month follow-up (p=0.001). The percentage of participants who discouraged their friends against CGS rose from 64% before camps to 87% at follow-up (p<0.05). Reported rates of recent CGS significantly declined from 6.9% at pre-test to 0.6% at follow-up (p<0.001).

Next steps: These included the need for partnerships between key stakeholders at school and community level, a commitment to working with teachers, and in keeping with the principles faced this year's students. As a technical level, it also highlights key characteristics for successful program- ming and implementation.

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MOPDX103

‘Test matches’, ‘One day internationals’ and other metaphors for multiple and concurrent partnerships at a university campus in Zimbabwe

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Issues: Although multiple and concurrent relationships (MCP) have been identified as key drivers of the HIV epidemic in Sub-Saharan Africa, there are still many uncertainties regarding how to define the phenomenon. For instance, does a once-off encounter with a sex partner constitute an MCP in the same way that having three regular partners does?

Description: The paper is based on an ethnographic study that was carried out at the University of Zimbabwe between August 2006 and December 2007. I documented the experiences of forty students (20 females, 20 males) in detail and also participated in thirty discussions on dating, sex and relationship topics that various student associations on campus organised.

In this paper I examine the different forms that MCP take at the University of Zimbabwe and discuss the metaphors that female and male students use to describe these relationships. Male and female students admitted to having one day international’ partners. Female students were also involved in cross-generational relationships with ‘Big Dharas’ or ‘NABAs’ (i.e. non-university men), while male students, in turn, engaged in ‘one day internationally’, ‘gold rushing’ and in ‘importing’. These refers to casual sex relationships with female students, casual sex with first year female students and casual sex with sex workers respectively. Furthermore, male and female students had ‘kissing friends’ or ‘friends with benefits’, that is, friends or classmates that they occasionally went to for sexual satisfaction.

Lessons learned: Most of the metaphors that students use to describe MCPs have been in use at the institution for many years and are the main means through which new students are inducted into a risk-taking and MCPs are normalized at the institution.

Next steps: Residential campuses offer great opportunities for the intensive study of the implicit and explicit rules that underpin MCPs.

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MOPDX104

Helping youth develop a healthy sexuality: a pre-risk prevention approach for involving families in adolescent sexual health promotion in Sub-Saharan Africa

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Issues: To raise an HIV-free generation, prevention efforts must begin before sexual behaviors are established. Many youth initiate sexual risk behaviors in preadolescence, yet HIV prevention programs are typically implemented in adolescence, missing an important window for prevention. Pre-risk prevention efforts are needed to equip youth with knowledge and skills to make healthy and responsible decisions about sexual behavior.

Description: Family-based programming may play an important role in reaching youth early with sexual health prevention messages. Based on an extensive research on parent-child communication, we developed and rigorously evaluated a program that enables parents to help shape their children’s decisions about sexual behavior and adapt the program to Kenya. The Families Matter! Program (FMP) is a five-session evidence-based intervention for caregivers of children aged 9-12 years that gives parents knowledge and skills to communicate about sexuality with their children.

Lessons learned: Significant cultural taboos exist in many cultures that bar parents from speaking with their children about sexuality and sexual decision-making. Additional challenges include rites of passage rituals, and cultural changes that have altered the context of sexuality education. Despite these challenges, over 50,000 Kenyan families have participated in FMP, and the program has been adopted by six additional countries: Tanzania, Ivory Coast, Botswana, South Africa, Zambia, and Mozambique.

Next steps: The success of FMP demonstrates that programs involving par- ents as sexuality educators can be implemented and embraced in Sub-Saharan Africa. Parents are clearly willing to abrogate cultural norms to protect their children’s sexual health.

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MOPDX105

Critical evaluation of the pilot project of education for sexuality and citizenship construction, Colombia (2006-2008)

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Background: In 2006, Colombia implemented a national pilot project for sexual and reproductive health education in primary and secondary schools in four cities. The aim of this investigation was to identify, analyze, and evaluate the underlying ideological assumptions about the project’s pedagogical ap- proach, gender, class, sexuality and sexual and reproductive rights.

Methods: This investigation is an educational evaluation based on the theo- retical tradition of critical pedagogy, especially its emphasis on the structural context, and the influence of gender, class, and race social categories in edu- cational practices. Methods were qualitative and included critical discourse analyses, and semi-structured and in-depth interviews. It was conducted in three phases: 1. Data collection of official documents related to the proj- ect and interviews with 35 teachers from the four cities included in the pilot and 5 government officials who designed and implemented the project. 2. Data organization and classification. 3. Systematization, analysis, and critical evaluation.

Results: The sexuality education project is grounded in the ideological per- spective that dominates the current Colombian government. The project re- flects a perspective that focuses on control and subjugation of young people’s lives while maintaining power to elite sectors. Human sexuality is thought in conservative moral terms: a human dimension that needs to be controlled through rules and coercion, thus privileging abstinence, traditional marriage, male dominance, and heterosexism.

Discussion: In Latin American countries, such as Colombia, it is necessary to develop citizenships that stand in opposition to existing racial, sexual, and class-based hierarchies. These new citizenships require a public language di- rected toward the elimination of the ideological and material conditions that drive different forms of oppression, subjugation, segregation, marginaliza- tion, stigma, and discrimination. An education program that recognizes young people’s sexual needs should include accurate information and social inclusion strategies that warrant human rights across differences in sex, gender, class and race.

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MOPDX106
Regional actions in Latin America and the Caribbean on the follow up of the Ministerial Declaration “Preventing through Education”: progress report August 2008-December 2009

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**Issues:** On August 1st, 2008, 31 countries: (30 Ministries of Health and 26 of Education) of LAC region adopted the Ministerial Declaration “Preventing through Education”. The CENSIDA of Mexico had elaborated a regional report of actions focused on achieve the goals of the Declaration.

**Description:** 17 countries of LAC region collaborated in the report. **Findings:** Supporter factors: funding from international agencies (UN) (100%), planning mechanisms of the Ministry of Education and Ministry of Health (94% and 88% respectively). Obstacles: economic and financial conditions (71%), geographical and cultural conditions (59%) and Political Context (19%). 100% of the countries implemented HIV/AIDS prevention strategies and articulated actions with NGOs, international agencies and academics. Only 10 countries realized research (needs of children, adolescent and youth). 13 countries real- ized changes in laws, norms and regulations. 1117 trainings and courses were offered in the region (654 delivered by academic institutions and 301 by the ministry of health). 50% of the countries provide information of HIV tests and services at middle school level. Only 9 countries transmitted mass media campaigns.

**Lessons learned:** The Declaration, has not been enough socialized. Substitu- tions of decision makers and managers had affected the operation of actions. There still being some political, social, cultural and economic factors difficult- ing the positioning of the comprehensive sex education based on scientific evidence on the public health policy agenda. There’s an imperative need of the establishment of a Comprehensive Sex Education department in the operative structure of the Ministries of Education in most of the LAC countries.

**Next steps:** Comprehensive sex education and promotion of sexual and re- productive health strategies based on scientific evidence must not be related with cultural and religious beliefs or political opportunities. Countries must develop a monitoring and evaluation system based on the contents of the Declaration. Governments must allocate specific resources to this initiative.

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MOPE0001-MOPE0006

MOPE0001
HIV-1 DNA PCR tests for early infant diagnosis in resource limited settings

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Background: The objective of this study was to evaluate and compare the results of Roche Amplicor 1.5 DNA PCR kit as against in house qualitative HIV-1DNA PCR using whole blood and dried blood spots (DBS). Methods: A total of 100 samples from children aged 2 to 6 years were collected from ART and PMTCT centers of Namakkal district headquarters hospital to compare the performance of the two PCR tests. Known 50 HIV negative and 50 HIV positive children were enrolled. From each child, 3 ml of whole blood was collected in an EDTA vaccutainer tube. Whatman 903 cards were used for DBS, one drop i.e. 50 micro liters of the sample was coated on each circle and air dried at room temperature for 3 hours. Qualitative HIV-1 DNA PCR was performed for both DBS and whole blood using the methods.

Results: Qualitative HIV-1 DNA PCR test results by both Roche and in house methods were concordant in all 50 DBS and whole blood samples of HIV negative children. The specificity was 100% for both DBS and whole blood. Of the 50 HIV-positive samples, one sample was negative by DBS for both in-house and Roche kit methods, but the same infant's whole blood sample tested positive by both the methods. The sensitivity of the test using whole blood was 100% but the sensitivity of the test using DBS was 98%.

Conclusions: In-house qualitative HIV-1 DNA PCR test performed as well as Roche Amplicor in detecting HIV-1 DNA on whole blood and DBS. The use of in-house qualitative HIV-1 DNA PCR test (cost effective) can be used on whole blood and DBS that will facilitate access to early diagnosis of HIV-1 infection for all infants born to HIV-1-infected mothers in rural and resource limited settings.

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MOPE0002
Prevalence of HIV and hepatitis B surface antigen (HBsAg) co-infection among children in Ilesha, Nigeria

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Background: Human Immunodeficiency Virus and Hepatitis B viral infections are two of the world’s most fatal infections (Hadler et al 2002) among other routes of transmission such as sexual, blood transfusion, sharing of needles, etc. HBV and HIV are transmitted from mother-to-child. This research is therefore designed to test the prevalence of Human Immunodeficiency Virus (HIV) and Hepatitis B Virus (HBV) co-infection among children. Methods: 144 blood samples were collected from children in Wellness Clinic of the Wesley Guild Hospital Ilesa Osun State Nigeria. These samples were tested for HBsAg and HIV by Bio-Rad Monolisa ultra kits.

Results: In this study a prevalence of 13.9% was observed among children which is consistent with the study of Umuoh et al. (2004) which expressed the range of the prevalence in the population of children as in Nigeria as from 2.7% to 13.3% this size though meager yet calls for attention because HIV and HBV could be transmitted perinatally thus the assumed statistical range could rise from 13.3% and further spread in the population. Of the 144 children 20 were positive (13.9%), 124 were negative (86.1%) of the specimen samples.

Risk of infection is higher among children of ages less than 5 years (27.8%) who probably acquired the infection during the perinatal period followed by children older than 5 years (20.2%).

Conclusions: This result stresses the reason why physicians should test children for the possibility of the presence of HIV and HBsAg. Also researchers should get more interested in this area to further enhance and enlighten the populace about the prevalence of HIV and HBV Co-infection in our sphere of influence.

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MOPE0003
Early HIV infant diagnosis in two reference laboratories in Cameroon

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Background: In Cameroon, it was estimated that 2004 that 500,000 people lived with HIV/AIDS among which 45,000 infants below the age of 15 months. The national statistics showed only 2091 children on antiretroviral therapy. Prevention of mother- to-child transmission of HIV is thus of great importance in understanding paediatric AIDS in Cameroon. The Ministry of Public Health launched a Program for early infant diagnosis and treatment of HIV among infants born to seropositive mothers in 2007. This Program relies on two reference laboratories: CDC/GAP-Cameroon and CRICB.

Methods: HIV diagnosis of newborns to HIV-positive mothers cannot be done by serology, due to the presence of maternal anti-HIV antibodies until age 15 months. Virologic methods are therefore more suitable for early HIV diagnosis. The ROCHE Amplicor HIV-1 DNA test version 1.5 was used for the detection of viral DNA in 9616 infants on dried blood spots (DBS) collected in 168 sites nation wide, corresponding to 5.3% coverage of the territory.

Results: Of 9616 infants tested, 985 were positive. According to the HIV testing algorithm, samples tested positive on the first PCR have to be retested. We observed a low rate of second sample collection. The overall infection rate in children (10.2%) was higher than the general population rate of 5.5%. The problems encountered were the lack of follow-up of HIV-positive infants and possible limitations of the testing kit which can not detect HIV-1 Group O, and probably Group N and P, specially in Cameroon known for its broad HIV genetic diversity.

Conclusion: We propose community appropriate strategies implementation to follow-up HIV-positive children to facilitate early initiation of ART (WHO recommendations), and identify ways of integration of HIV viral load and drug resistance testing using DBS in the paediatric care package.

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MOPE0004
Correlation between V3-V5 sequences with co-receptors in HIV-positive pregnant women from India

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Background: CXCR4 (lufin) and CCR2 are two important co-receptors for V3-V5 region of the envelope (env) gene encompassing potentially pathogenic domain of HIV-1. There is no data on co-receptor utilization in HIV-1 positive subtype C pregnant women.

Methods: Blood samples were collected from sixteen HIV seropositive pregnant women, eight of which were from antenatal care and eight from other risk groups. Part of the HIV-specific env gene (V3-V5) was amplified and sequenced. V3 amino acid sequence was used to predict co-receptor by PSSM method. Biodiv version 7.0.9.0 was used to construct the entropy plot to compare sequence variability between CCR5 and CXCR4 utilizing co-receptors. Bioafrica, HIV Peptide/Epitope Analysis Tool was used to search for similarities and mutations on V3 loop sequences.

Results: Analysis of the results revealed that all samples of the present study belonged to HIV-1 subtype C. No significant change in the nucleotide sequence within all 16 isolates of our study was found including 8 from HIV-positive women and therefore the receptor binding behavior in all cases seems to be identical. Out of the 16 samples, 15 were predictive of utilizing CCR5 as co-receptor and one for CXCR4. Across the V3 region, the CXCR4 variants were more variable, with high variation at amino acid position S, 11 and 14 of the V3 loop. The antigenic tip in this study was found to be GPGQTVY in > 90% of the cases.

Conclusions: No significant variability was observed in the V3 loop region of samples from pregnant women and one of other risk groups that may possibly be attributed to play some specific role in mother-to-child transmission. However, the present study is based on limited no., therefore more studies taking larger number of samples from different geographical regions of India, from different stages of HIV infection should be carried out to establish the same.

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MOPE0005 Primary and secondary antiretroviral resistance mutations among HIV-1-infected pregnant women from Central West Brazil
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Background: Antiretroviral (ARV) drug therapy (nucleoside reverse transcriptase inhibitors, NRTI; non-nucleoside reverse transcriptase inhibitors, NNRTI; protease inhibitors, PI) during pregnancy can prevent HIV-1 mother-to-child transmission (MTCT). However, drug resistance mutations may reduce the efficacy of therapy increasing the risk of MTCT.

Objectives: To assess ARV resistance mutations among HIV-1 infected pregnant women.

Methods: Patients recruited in Goiás State, central west Brazil (2008-2009) had viral loads, CD4 counts assessed. Protease/PI and partial Reverse Transcriptase/RT genes were PCR-amplified and sequenced from plasma RNA. ARV mutations in PR/RT were analyzed by the Stanford Database/International AIDS Society-USA list.

Results: Main features of 94 pregnant women were: median age ~26 years (16-42 range), 57% (54/94) were recently diagnosed (21 weeks median gestational age); 38% were AIDS cases, 67% were ARV-naive; 19% (18/94) were under ARV and 14% discontinued ARV. Seventy samples were genotyped and 60% were PCR-amplified. Among naïve women 5.7% (3/53) had primary drug resistance mutations; PI mutations M46I (n=1) and NNRTI mutations K103N, M230L (n=2). Secondary drug resistance was observed in 35.3% (6/17) of ARV-experienced patients, 2 had major mutations to three ARV classes. Major PI mutations: D30N, M46L, I50L, V82A, N88D, L89M (n=3); intermediate/high NNRTI resistance mutations: L100I, K103E, K103N, Y181C, G190A, P225H (n=5); NRTI mutations: D67N/K, K70R, M184V, T215Y and K219E (n=4) were observed. Resistance mutations to nevirapine, lamivudine and zidovudine prevailed among multidrug experienced women: 4/6 were on HAART (lamivudine/avirepine) and 2 discontinued medication. Medians of viral loads and CD4 T cell counts of ARV-experienced women were 9,646 copies/mL and 387 CD4+ cells/mL.

Funding: UNESCO/AIDS/STD/Brazilian Ministry of Health (Grant#310-06). M/RT/CT/CNTCT/SCTIE/DECT/CT-Saúde (GRANT #022/2007). Presenting author email: marianestefani@hotmail.com

MOPE0006 Human immunodeficiency virus type 1 early detection by using dried whole blood spot among vertically exposed infants in Bobo Dioulasso, Burkina Faso
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Background: In sub-Saharan Africa where HIV infected infants is more important, dried blood spot (DBS) can be a reliable diagnosis tool of pediatric HIV-1 infection in order to provide a rapid ART treatments.

Methods: From November 2009 to January 2010, dried blood spots were obtained by heel, finger or great toe stick from babies born to HIV-1-positive mothers followed up at the national program of Prevention of Mother-to-Child Transmission. All of those DBS were realized in peripheral antenatal clinics of Bobo-Dioulasso where they have been stored at room temperature in individual ziplock plastic with dessicant sachets at least 2 weeks before shipped to the National Virology Laboratory of Centre Muraz for routine molecular diagnosis. HIV-1 RNA extraction/quantification on DBS specimens was performed as follows: (i) HIV-1 RNA detection/quantification was performed using the Generic HIV-1 Viral Load assay (Biocentric, Bandol, France). The prevalence rate of HIV-1 transmission was evaluated.

Results: A total of 67 specimens collected, 9 (13%) was detected viral load. 32 infants had less 6 months, 21(6 -12 months) and 14 (12 - 17 months). The mean duration of DBS storage at room temperature was 23 days. From 32 women treated with ART during pregnancy, 3 babies were infected by HIV-1 (9.4%). Seven mother and baby couples were not received any ARV treatment and 24 were not PCR-amplified. Of them 1 infant has been infected (14.3%). Forty-eight mothers used breastfeeding, 12 mixed feeding and 6 artificial feeding in order to breast the child. Secondary drug resistance was observed in 35.3% (6/17) of ARV-experienced patients, 2 had major mutations to three ARV classes. Major PI mutations: D30N, M46L, I50L, V82A, N88D, L89M (n=3); intermediate/high NNRTI resistance mutations: L100I, K103E, K103N, Y181C, G190A, P225H (n=5); NRTI mutations: D67N/K, K70R, M184V, T215Y and K219E (n=4) were observed. Resistance mutations to nevirapine, lamivudine and zidovudine prevailed among multidrug experienced women: 4/6 were on HAART (lamivudine/avirepine) and 2 discontinued medication.

Funding: UNESCO/AIDS/STD/Brazilian Ministry of Health (Grant#310-06). M/RT/CT/CNTCT/SCTIE/DECT/CT-Saúde (GRANT #022/2007). Presenting author email: marianestefani@hotmail.com

Acute and early HIV infection MOPE0007-MOPE0008

MOPE0007 Normal, unselected B cells potentiate HIV infection of PHA or anti-CD3 + IL-2 activated PBMCs in vitro
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Background: Purified B cell subsets, activated and selected for DC-SIGN, have been shown to present HIV to CD4+ T cells, analogously to DC binding, internalization, and re-presentation of HIV via DC-SIGN. B cells have also been implicated in specific B cell mediated transmission of HIV. Further, B cell CD40 was shown to bind viral membrane CD40L. Nevertheless, B cells are still generally considered incidental or irrelevant to HIV transmission. We asked whether normal, unselected B cells played a detectable role in HIV infection during standard PHA or anti-CD3 + IL-2 activated PBMC cultures, in the absence of specific Abs, and without pre-selection for, or activation of, specific B cell subsets.

Methods: Normal donor PBMCs were depleted of CD19+ B cells by two rounds of immunobeads or immuno-affinity column negative selection (< 1% CD20+). Parallel groups of 10 million B cell depleted or unselected PBMCs were exposed to 1 x 10^5 HIV-1 Bal, for 1 hr, washed, and stimulated (2 x 10^5 cells/ml) in quadruplicate with anti-CD3+IL-2 or PHA + IL-2. Cultures were batch assayed for supernatant p24 at 1, 3, 5, 7, 10 days.

Results: While some impact on early HIV growth was expected, we were surprised to find almost complete abrogation (>90%) of viral replication, for at least the first week, by removal of B cells prior to infection and cell stimulation.

Conclusion: B cells, with access to lymph nodes, may be critical components of early hyperacute HIV transmission, to and from the earliest mucosal and gut sites of infection. Recognition of this fact may inform prevention strategies that can be modeled in vitro. Mechanisms and extent of B cell involvement in early viral transmission may vary among individuals in a genetically determined manner that can also be assessed in vitro, possibly revealing new susceptibility factors.

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MOPE0008 Ultra-sensitive analysis of HIV quasispecies during acute infection in gut biopsies and plasma

Background: Early events taking place during primary HIV infection are fundamental in subsequent disease progression. During the acute phase, massive viral replication occurs in gut and peripheral blood in acute and chronically infected patients.

Methods: Five HIV-acute infected and 4 chronic patients were enrolled, while being free of therapy. To study viral quasispecies, ultra-deep pyrosequencing (UDPS) of env V3 loop region was performed on both duodenal biopsies and plasma. By Position Specific Score Matrix analysis. Results: Both acute and chronic patients displayed predominant R5 genomes both in the circulation and in the gut. Frequency of X4 variants and extent of genetic diversity were highly correlated (r=0.84, p< 0.0001). Neither X4 frequency nor genetic diversity in gut tissue were correlated with the corresponding parameters in plasma, in both acute and chronic patients. Genetic diversity tended to be lower in circulating virus from chronic patients, with one exception represented by one acute patient with low CD4 counts, high viral diversity, and high frequency of X4 variants in plasma. On the contrary, gut virus diversity was similar in acute and chronic patients.

Conclusions: UDPS represents a breakthrough in the study of HIV pathogenesis, providing quantitative evaluation of frequency of variants in viral quasispecies. By this approach, we showed a strong correlation between X4 frequency and viral diversity in HIV quasispecies, consistent with the enrichment of X4 variants along virus evolution within each individual. The lack of correlation between X4 frequency and genetic diversity in gut and plasma during both acute and chronic infections suggests that viral compartmentalization is an early event during natural history of HIV infection.

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Preclinical HIV drug development

**MOPE0009**

**Novel 2-(chloro/fluorophenyl)-3-(chloro/fluorobenzo[d]thiazol-2-yl) thiazolidin-4-one derivatives as HIV-1 reverse transcriptase inhibitors**

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**Background:** Reverse transcriptase (RT) inhibitors are among the drugs mostly used for the treatment of human immunodeficiency virus type 1 (HIV-1) infection. Although, many compounds are already used as anti-HIV drugs, research on development of novel inhibitors continues, since drug resistant strains usually appear because of prolonged therapy. Among the RT inhibitors used, non-nucleoside analogues (NNRTI) have the benefit of exhibiting less undesired side effects, although, the probability of drug resistance is higher in this case compared to the use of nucleoside/nucleotide (NRTI) inhibitors. In the present study, six 2-(chloro/fluorophenyl)-3-(chloro/fluorobenzo[d]thiazol-2-yl)thiazolidin-4-one derivatives were synthesised and tested as HIV-1 RT inhibitors.

**Methods:** Evaluation of their inhibitory action was made by a colorimetric phenol red assay. Inhibitory activity was based on the inhibition of d-oxigenin-labeled dUTP in the synthesized DNA molecule.

**Results:** Among the tested compounds, some had IC50 values at the sub-micromolar range. Interestingly, in most cases, replacement of a Cl-substituent of the phenyl ring with a F atom greatly affected compound activity, resulting in more than 100-fold change in IC50 value. Comparison of the compounds with the 2-(chloro/fluorophenyl)-3-(chloro/fluorobenzo[d]thiazol-2-yl)thiazolidin-4-one derivatives previously synthesized and tested by our team, showed that the presence of F or Cl-substituent strongly favors compounds activity compared to the presence of O- or MeO- substituent.

**Conclusions:** Some of the tested compounds are good HIV-1 RT inhibitors. Moreover, study of the structure-activity relationship leads to conclusions which can be used for design and synthesis of more active compounds in the future. The results of the present study can be a good step for development of novel drugs for the treatment of HIV-1 infection.

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**MOPE0010**

**Design and synthesis of novel substituted uracil derivatives as potential reverse transcriptase inhibitors for therapy and prevention against HIV-1 infection**

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**Background:** The development of novel small molecule NNRTIs with improved patterns of long-term stability and drug resistance represents an important challenge to improve current antiretroviral therapy and to prevent HIV-1 transmission. Several novel uracil derivatives have been developed as NNRTIs. Emivirine reached phase-III clinical trials with AIDS patients, however, it was not further developed. One issue is the emergence of the NNRTI-resistant mutants K103N, Y181C, Y181C + K103N, and the triple mutant K103R + V106A + V106M. An emivirine derivate showed higher antiviral activity against HIV-1 wild type and greater tolerance to mutated HIV-1 strains than emivirine itself compared to the commonly used cationic commercial transfection reagent Lipofectamine RNAiMAX.

**Methods:** HeLa MAGI-CCS cells expressing CCR5 and CXCR4 co-receptors and CD4 was used as a cell model. Intracellular localization of internalised FITC-labelled anti-GAPDH siRNA was monitored in live cells using fluorescence microscopy and cellular uptake was quantified by flow cytometry. Silencing activity was measured by flow cytometry and RT-PCR.

**Results:** Neutraplex anionic formulation could effectively deliver a fluorescence model siRNA in the presence of serum into MAGI-CCS cells at concentrations as low as 50 nM. When CCR5-specific siRNA was delivered in cells transfected with live anionic lipoplexes, CCR5 mRNA and protein levels were significantly reduced when compared to a scrambled non-silencing sequence, confirming the biological activity of the siRNAs. In addition, cells transfected with Neutraplex presented low cytotoxicity.

**Conclusions:** These results demonstrate that it is possible to efficiently deliver siRNAs using negatively charged lipoplexes. Anionic lipoids appear of higher clinical interest since cationic lipids tend to show more toxicity following systemic injection. Furthermore, Neutraplex particles appear to mediate cellular penetration through a fusogenic/lipid exchange mechanism avoiding endocytosis, a mechanism poorly represented in T cells. Therefore anionic delivery systems may have potential for RNA interference therapeutic intervention in HIV-1 infection.

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**MOPE0011**

**Anionic lipid-based nanocarrier Neutraplex could effectively deliver anti-CXCR4 siRNA in cell cultures**

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**Background:** Small interfering RNAs (siRNAs) have been successfully used to block HIV infection in vitro and in vivo. However their development as antiviral agents has been limited by their poor delivery in cells. Cationic lipidic formulations have been successfully used to deliver siRNA into cells but they show limitations in vivo application due to their cytotoxicity and instability in the presence of serum. To overcome these limitations we have developed an anionic lipid-based nanocarrier that we named Neutraplex. In this study, the efficiency of the anionic delivery of short interfering RNA (siRNA) in cells was investigated and compared to the commonly used cationic commercial transfection reagent Lipofectamine RNAiMAX.

**Methods:** HeLa MAGI-CCS cells expressing CCRX4 and CXCR5 co-receptors and CD4 was used as a cell model. Intracellular localization of internalised FITC-labelle (anti-GAPDH siRNA was monitored in live cells using fluorescence microscopy and cellular uptake was quantified by flow cytometry. Silencing activity was measured by flow cytometry and RT-PCR.

**Results:** Neutraplex anionic formulation could effectively deliver a fluorescence model siRNA in the presence of serum into MAGI-CCS cells at concentrations as low as 50 nM. When CCR5-specific siRNA was delivered in cells transfected with live anionic lipoplexes, CCR5 mRNA and protein levels were significantly reduced when compared to a scrambled non-silencing sequence, confirming the biological activity of the siRNAs. In addition, cells transfected with Neutraplex presented low cytotoxicity.

**Conclusions:** These results demonstrate that it is possible to efficiently deliver siRNAs using negatively charged lipoplexes. Anionic lipoids appear of higher clinical interest since cationic lipids tend to show more toxicity following systemic injection. Furthermore, Neutraplex particles appear to mediate cellular penetration through a fusogenic/lipid exchange mechanism avoiding endocytosis, a mechanism poorly represented in T cells. Therefore anionic delivery systems may have potential for RNA interference therapeutic intervention in HIV-1 infection.

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**MOPE0012**

**Pharmacological profiling of novel HIV-1 protease inhibitors as effective P-glycoprotein inhibitors for combined antiretroviral therapies**

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**Background:** All HIV-1 protease inhibitors are substrates of P-glycoprotein which is expressed at the blood brain barrier and in the testes tissue. So these drugs cannot prevent viral replication both in the CNS and in the testes tissue. Also ritonavir used as P-gp inhibitor in boosted combined therapies is a P-gp substrate with certain toxic properties. We investigated novel HIV-1 protease inhibitors as dual effective P-gp inhibitors concerning possible P-gp substrate toxicity in relevant cell models.

**Methods:** P-gp inhibiting properties were evaluated in an exclusively P-gp overexpressing subcell line in comparison to the parental cell line with the fluorescence P-gp substrate rhodamine 123 by determination of the fluorescence uptake in both cell lines using flow cytometry. The cytotoxic properties of the inhibitors depending from the P-gp expression was investigated and compared to the commonly used cationic commercial transfection reagent Lipofectamine RNAiMAX.

**Results:** All new HIV-1 protease inhibitors are better P-gp inhibitors than ritonavir. The cytotoxic profiling proved that all of the inhibitors are nontoxic in P-gp inhibiting concentrations. While ritonavir proved to have significant P-gp substrate properties according to higher IC50 values of cytotoxicity in relation to the P-gp expression, the novel HIV-1 protease inhibitors partly have no P-gp substrate properties.

**Conclusions:** All new HIV-1 protease inhibitors suffer from their properties of being substrates of P-glycoprotein which leads to resistance developments because certain viral sanctuaries cannot be therapeutically reached. Also ritonavir itself is a P-gp substrate in vitro studies have been disappointing compared to the in vitro results. The new HIV-1 protease inhibitors are effective P-gp inhibitors because of their higher activities and the fact that they are not P-gp substrates. So they are perspective candidates for clinical trials for improved HIV therapy regimes.

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A pilot study to determine the effects of an adult stem cell enhancer, blue green algae, on suppressed HIV patients with undetectable viral load <400 copies/mm³

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Background: Members of the Schick Foundation have become acquainted with a product called Blue green algae (BGA). BGA is acutely a cyanobacteriuum with the name of anhexema flos aquae (AFA). The active agent in AFA is called U-Selectin lifgand which releases bone marrow stem cells (CD34+ T cells) from the bone marrow of people 30% 2 hours after oral ingestion.

Methods: We have developed a pilot study testing 1000 mg of BGA on HIV+ patients who have virologically suppressed for at least 6 month with antiretroviral agents, preferably Atripla. All patients have viral loads<400copie/s/mm3. 30 patients are involved in this pilot study, stratified by CD4 counts: 200--350, 350-500, >500. The study is a 6--7 month study and is underway now. All the markers of HIV infection are followed 1 time per month. They are D-Dimer, HIV RNA, proviral DNA, viral culture, LPS, and CRP.

All patients take 1000 mg of BGA in addition to Atripla every day of the study. The hypothesis for success is as follow: BGA is a small molecule which can get into the reservoirs of the person. BGA decreases inflammation and HIV is an immune activation disease. We want to see how this causes inflammation.

Results: One patient has already completed the protocol whom we call pa- tient 2. This patient has shown no toxicity to the combination of AFA and BGA. We have shown a statistically significant increase in CD4% and CD4 count. All the most markers of HIV infection stay at the same level. We are nearly 200/1000 mg BGA.

Conclusions: Blue Green algae is worth studying further as we are doing. Presenting author email: schickpm@aol.com

MOPE0014
Silencing of HIV RNA by activating viral RNase H

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Background: We are characterizing the retroviral RT/RNase H and compared it to the PAZ/FIPI domains of the cellular Dicer complex involved in siRNA biosynthesis and antiviral effects of Dicer in the absence of Interferon. Similarities between the retroviral RNase H and FIPI lead us to the hypothesis that retroviral RNA-hybrid structures in comparison to double-stranded RNA act as substrates.

Methods: We used miRNAs as model to design a hairpin-loop DNA oligonucleotide (ODN) and investigated its effect on the virus-associated reverse transcriptase RNase H in cell-culture, animal studies and in patient-derived primary blood samples from Zurich and Africa and observed viral RNA silencing ('UDNA effects').

Results: We are driving HIV into suicide by adding the ODN to the virus particles where it can enter, bind to the target RNA and destroy the RNA before DNA synthesis. Treatment of cell-free HIV particles, of newly HIV-infected cells - even with multi-drug-resistant HIV- or of mice, infected with the oncogenic Murine Spleen Focus Forming Virus, inhibited virus infection, replication and disease progression. It even prevented tumor formation. We are also using humanized SCID mice with ODN to test for inhibition of HIV replication and the silencing effect by ODN-treatment of the blood of 30 primary isolates from patients by ex vivo treatment, in more than 30% by 1000fold. Also the viral load in a mouse vaccine model can be statistically significantly reduced.


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MOPE0015
HIV gene therapy using the neutralizing monoclonal antibody (mAb) 2F5

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Background: The mAb 2FS is directed against the MPER of the HIV-1 gp41 and has shown to be potent and broadly neutralizing when used alone and in addition to other mAbs, to prevent intravenous and mucosal HIV infection in macaques.

Methods: The heavy and the light chain of the 2F5 antibody were cloned into retroviral and lentiviral vector backbones. Human T and B cell lines, murine hematopoietic stem cells as well as primary murine and human T cells were transduced. Western blot- and to measure amount of secreted Ab, T20 binding ELISA were performed. Production of the antibody was induced in a single round infection assay with HIV pseudotyped lentiviral particles.

Results: In vitro experiments show that genetic incorporation of T and B cell lines as well as primary T cells resulted in production of functional 2FS in supernatant. After repulsion of NOD SCID gamma chain double knock out mice with transduced CD4 cells, and Rag1 mice with stem cells, 2F5 was detected in mouse sera till the day of sacrifice.

Conclusions: After retroviral gene transfer, functional 2FS antibody was secreted by B and T cells in vivo and in vitro drug release study.

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MOPE0016
A strategy to reduce new HIV infection, prevention and treatment: prolong release anti-HIV polymeric vaginal film - it's in vivo and in vitro drug release study

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Background: Women are approximately 50% of total HIV infected people worldwide. In this critical moment for universal access to prevention, the strategy for prevention, prolong release anti-HIV polymeric vaginal film (APVF) may be a welcome choice of strategy. APVF's are suitable for a wide variety of drugs and release drugs in a prede- termined manner with better vaginal dispersion, bioadhesion and aesthetic appeal. Teenagers will prefer the APVF because of privacy, more self-control to STDs protection, quick self-insertion and self-removal with own finger before intercourse. Drug delivery across vagina is a challenging task. Thus, the APVF was engineered to coat vagina with a stable HIV protective layer.

Methods: Zidovudine (pft, APL Research Centre, India) was used as a model drug. APVFs of zidovudine, prepared by solvent-casting method using combination of different polymers [EC:HPMC(F1), Acrylic 5100:HPMC(F2)] and EC:HPMC(F3) in 1:1 ratio, were evaluated. UV spectroscopy was used (λmax 267 nm) for the routine analysis of Zidovudine.

Results: Drug particles were distinctly observed in Scanning Electron Micros- copy of APVF. F1 was selected for detailed study due to high drug content (87.5±2.09%), folding endurance (304±5.83), swelling index (14.25±0.76) and good mechanical properties. In-vitro drug diffusion kinetic explained swelling controlled Case I Fickian diffusion mechanism. In-vitro permeation of APVF released only 47.57± 7.68 % Zidovudine, even after 36 hour us- ing immediately excised goat vaginal tissue with a stable swelled layer with bioadhesion strength (22.04±1.28). From in vivo pharmacokinetics of APVF, F1 demonstrated t1/2 (6 hours), 1 (0.38 hr), AUC in 24 hr (467.52±8.92 hr/m), when compared to standard oral conventional Zidovudine tablet, in HPLC (RPC18 column flow rate 1ml/min) with UV detector at λ 267 nm.

Conclusions: Prolong release APVF was found to be a good strategy to re- fuse new HIV infection, prevention and for sustained antiretroviral therapy.

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MOPE0017
HIV-1 integrase inhibition by novel spiro-isatin-cyclopropene derivatives

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Background: HIV-1 integrase inhibitors act by blocking the process of incorpo- ration of virus genome into the host cell's DNA. The crucial role of integrase in HIV life cycle and the absence of a human homologue made HIV-1 integrase an important drug target. The first integrase inhibitor, raltegravir, approved by the US. Food and Drug Administration in 2007, offered hope to HIV-patients. Since integrase inhibitors target a different step of viral life cycle, patients may receive integrase inhibitors in combination with other types of anti-HIV drugs to minimize development of resistant strains.

In the present study, twelve novel spiro-isatin-cyclopropane derivatives bearing a COOme or CN substituent at the cyclopropyl moiety and a halogen or a NO2 substituent at the phenyl ring were synthesised and tested as HIV-1 integrase inhibitors.

Methods: Evaluation of inhibitory action was achieved by a colorimetric, photometric enzyme immunoassay kit provided by Cayman Chemicals. A method based on detection of integration of a double-stranded HIV-1 LTR US donor substrate into a double-stranded target substrate containing 3'-end modifications. Sodium azide was used as a positive control.

Results: Half of the tested compounds exhibited inhibitory action. Inhibi- tion varied, depending on the type of substituents and the nature of the bio- reactions of substrates in cyclopropane moieties resulted in production of di-trans isomers. Co-trans isomerisation strongly affected inhibitory action. Addition of two halogen substituents led to the most active compound.

Conclusions: Many isatin derivatives have been previously found to pos- sess anti-microbial properties. According to present results, certain spiro-isatin derivatives may possess HIV-1 integrase inhibitory activity. Further exploitations may come from the study of structure-activity relationship and more active compounds may be synthesised based on this study.

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Background: The intracellular concentration of high molecular weight molecules such as Hsps is important for their function but is not achievable in mammalian cells due to the impaired constitutive expression/induction of Hsps in them: the most suitable system for their production is bacteria. Therefore, the expression of the reporter gene into human cells highly permits the identification of potential lead candidates for drug development.

Methods: A series of 100-150 amino acids-long synthetic peptides were created using the GeneSwitch™ System for hormone-inducible expression of Rev. Rev containing peptides were used as target to select peptide ligands by cell transfection and optimization for binding on peptide arrays. HIV-1 entry inhibition assays were performed to assess peptide activity.

Results: Peptide ligands selected with CD4-induced expression could inhibit the entry and viral replication of HIV-1 in primary T cells and HeLa cells. Peptides were able to interact with coreceptors in a cell line that recapitulates the entire HIV replication cycle and allows unbiased identification of HIV inhibitors. The most potent peptide ligand, C46, inhibited HIV-1 entry into T cells in a neutralizing manner. Peptide activity was consistent across different biological sources resulting in the identification of novel inhibitory molecules.

Conclusions: Peptide ligands identified with CD4-induced expression can selectively diminish production of the red fluorescent signal without affecting levels of the yellow fluorescent Rev-Phy signal. The present study aimed at examining this hypothesis.

Methods: The cellular pools of CD4+ T lymphocytes and monocytes were isolated from 16 AIDS patients. Separation of the HIV-1-infected and non-infected cells was performed on a FACS using specific labels. The isolated subpopulations of monocytes were cultured into adherent macrophages. The subpopulations of CD4+ T cells and macrophages were treated with the protease inhibitors, MG132 or bortezomib (velcade, an anti-myeloma agent). The post-treatment cell death (apoptosis and necrosis) were determined with FITC-annexinV test or TUNEL/propidium iodid staining.

Results: Here we have revealed that the HIV-1-infected CD4+ T cells and macrophages were much more (3-4-fold) sensitive to the cytotoxicity induced by 10 – 400 nM MG132 or bortezomib compared to the non-infected cells treated by the same way. This enhanced susceptibility of the infected cells seemed to be due to the impaired constitutive expression of Hsps in them: the intracellular chaperone deficiency may become critical in the case of protease inhibitor treatment. This machine dysfunction that leads to accumulation of the aberrant protein molecules in the cell.

Conclusions: We conclude that the HIV-1-infected CD4+ T cells and macrophages are extremely sensitive to the proteasome inhibition as compared with the non-infected cells. If so, clinically applicable proteasome inhibitors (e.g. velcade) may be used for selective purging of the HIV-1 reservoirs in vivo.
Exhibition

58
Monday 19 July
Poster Exhibition

Tuesday 20 July

Author Index

XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria

Methods: We implemented a rational drug design algorithm and the phar- macophore docking approach to develop and characterize the novel class of LEDGF/p75-IN interaction inhibitors (LEDGINs). To identify active hits we established a high throughput Alphascreen assay monitoring the LEDGF/p75-IN interaction. Medicinal chemistry and costurables of compounds soaked in the IN CCD were used to refine and optimize the hits. An early lead compound, CX4328, was further characterized for its antiviral activity in the MT-4/HMT assay. Real-time qPCR was performed to quantify the different viral DNA species. Moreover, we selected a resistant strain by subcultivating HIV-1ΔIN, in the presence of CX4328 in C8166 cells.

Results: CX4328 with an IC50 of 2.71µM and selectivity index of 25 has been shown to be an IN inhibitor. A crystallographic IN complex in complex with the CX4328 reveals that the compound binds in the LEDGF/p75 binding pocket of IN. No cross-resistance with the existing antiretroviral (ARV) classes was observed. By qPCR we show that CX4328 inhibits integration. Much alike integrase strand transfer inhibitors, we observed an accumulation of 2-LTR circles and a re- duction in integrated copies whereas the late reverse transcriptase products remain unaffected. A resistant strain with A128T mutation in the IN coding region was identified.

Conclusion: Our work provides a proof-of-concept to develop novel antivirals targeting intracellular cofactors. Moreover, LEDGINs will increase our understanding of the HIV replication cycle. Further hit-to-lead development is ongoing to bring these LEDGF/p75-integrase interaction inhibitors in the clinic.

MOPED025
Establishment of mass production system for lysozyme known as potential curative medicine to AIDS
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Background: Although lysozyme is known as the antibacterial medicine for many years, it turns out that it is effective also in the antiviral activity to AIDS in recent years. Moreover, it has anti-tumor, and immunoregulatory effects. In order to spread this potential protein as an useful medical agent, it is necessary to reduce the production cost. For this purpose, we expressed synthetic human lysozyme gene in silkworm larvae and compared with other systems to establish a system for large-scale production.

Methods: Human lysozyme gene (473bp) was synthesized from 8 synthetic DNA oligomers by SFR method and PCR extension. This artificial gene was expressed in 2 kinds of yeast cell lines, and in insect cell line and silkworm larva using baculovirus expression systems. The secretion rate of recombinant human lysozyme in the medium or hemolymph was measured by the lytic activity against bacterial cell wall.

Results: There was intentionally a lot of production of human lysozyme (more than 400mg/L) in the silkworm haemolymph. As the result of N-terminal se- quencing and mass spectrometry, it was physicochemically the same as the natural human lysozyme. The productivity of recombinant human lysozyme in the silkworm haemolymph was 115 and 154 times higher than those of the yeast and silkworm cell culture systems.

Conclusions: From these results, we concluded that silkworm system using silkworm larva is the most suitable system to mass-produce the ly- sozyme with the same properties as natural lysozyme is known as its anti-virus effect including HIV, this cost-effective system will make substantial contribution to develop new AIDS therapeutic agent.

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MOPED026
Discovery of natural products with anti-HIV activity by bioassay-guided fractionation in an industrial non-industrial setup.
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Background: Natural products (NPs) are an inexhaustible source of novel and extremely diverse bioactive compounds. Nearly all therapies against cur- rently treatable diseases involve drugs representing or derived from natural products. HIV with its multiple target-sites and the potential to evade current antiretroviral therapy (HAART) requires a continuously and accelerated search for novel therapeutics. Natural products with their largely unexplored diversity present a promising strategy for the discovery of novel anti-HIV drugs. As NP-research requires expertise from multiple scientific disciplines, it is pre- destined to be applied in an academic setup.

Methods: Here we present our approach for identification of novel anti-HIV NP by bioassay-guided fractionation in an industrial non-industrial setup. Novel anti-HIV bioactive compounds are selected from large variety of environmental conditions (e.g. high light stress, UV, fungi, algae, higher plants, marine animals or even biofilm-like assemblages of microbiota (CORE)). Bioassay-guided fractionation enabled separation of antiviral from inactive or toxic fractions. In addition we demonstrate how changes in environmental conditions can enhance production of antiviral metabolites in selected organisms. Unique large-scale climate simulators at BIOR/EUS (Department of Environmental Engineering) allow the exploration of a wide variety of environmental conditions (e.g. high light stress, UV ozone) on the production of antiviral metabolites by plants and other organ- isms.

Conclusions: Taken together these possibilities empower us to search for novel anti-HIV lead candidates from the universe of natural products in a non-industrial setup.

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MOPED0023
Miltifcine efficiently inhibit HIV-1 transmission from human primary monocyte-derived dendritic cells to CD4+ T cells
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Background: Miltifcine (Hexadecylphosphocholine ester of hexadecanol, a membrane-active, alkylphospholipid. Miltifcine is an antiprotein drug. Miltifcine was originally discovered and synthesized as an anionicccept. Dendritic cells (DCs) are versatile antigen-presenting cells, play a crucial role in HIV-1 infection and dissemination. Indeed, it has been reported that HIV-1 is efficiently transferred from DCs to CD4+ T cells via integrin-mediated cell-cell interactions (ICM). In the current study, we investigated the influence of miltifcine on virus transmission with physiologi- cally relevant human monocyte-derived dendritic cells.

Methods: Primary human monocyte-derived immature dendritic cells (iDCs) were first pulldown with N1L38aen (fully competent RS-tropic virus) for 1 hour and washed. Next iDCs were incubated with or without autologous CD4+ T cells and either left untreated or treated with different doses of miltifcine. Protein-based binding assays such as yeast two-hybrid and in vitro pulldown assays were used to demonstrate interactions between HIV-1 proteins and miltifcine subunits. Amino acid regions of HIV proteins directly involved in bind- ing of miltifcine were also identified.

Results: We show that our approach can be applied to identify anti-HIV activities in large diversity of crude biological materials including bacteria, fungi, algae, higher plants, marine animals or even biofilm-like assemblages of microbiota (CORE). Bioassay-guided fractionation enabled separa- tion of antiviral from inactive or toxic fractions. In addition we demonstrate how changes in environmental conditions can enhance production of antiviral from inactive or toxic fractions. In addition we demonstrate how changes in environmental conditions can enhance production of antiviral metabolites in selected organisms. Unique large-scale climate simulators at BIOR/EUS (Department of Environmental Engineering) allow the exploration of a wide variety of environmental conditions (e.g. high light stress, UV ozone) on the production of antiviral metabolites by plants and other organ- isms.

Conclusions: Taken together these possibilities empower us to search for novel anti-HIV lead candidates from the universe of natural products in a non-industrial setup.

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MOPE0027

Recombinant gp41 NHR trimers as anti-HIV-1 therapeutics or microbicides

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Background: T20 (Fuzone, enfuvirtide), a peptidic anti-HIV drug, is highly effective against HIV-1 infection. But because of high cost of peptide production, it is unaffordable to the majority of people in poorer countries. Therefore, we designed recombinant gp41 N-terminal heptad repeat (NHR) trimers with similar antiviral potency as T20, but lower cost of production. They can be developed as anti-HIV therapeutics or microbicides for use in developing world.

Methods: The HIV-1 gp41 NHR portion was fused to the T4 fiber trimera
dized domain, Foldon (Fq) to construct NHR-trimmers, which could be expressed in E. coli cells. Their anti-HIV-1 activity and stability were assessed in HIV-1 inhibition assays.

Results: The purified recombinant NHR-trimmers exhibited SODS-resistant tri-
meric coiled-coil conformation which could interact with CD4 peptide to form stable six-helix bundle and possessed potent anti-HIV-1 activity against a broad spectrum of HIV-1 strains, including T20-resistant variants. They are more resistant to protease digestion than T20.

Conclusions: The recombinant gp41 NHR-trimmers have great potential for further development as affordable therapeutics or microbicides for treatment and prevention of HIV-1 infection.

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MOPE0028

A recombinant vesicular stomatitis virus encoding HIV-1 receptors and CX40 ligand as a novel potential anti-HIV-1 therapeutic agent

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Background: OX40 protein is highly expressed by activated CD4-positive lymphocytes in the healthy human immune system and functions as an adhesion molecule with OX40, which results in costimulatory and coactivation of CD4 positive T lymphocytes. Therefore, this potentially targets HIV-1-infected cells and signifies an important step towards the development of an effective and safe anti-HIV-1 therapeutic.

Methods: We generated a novel rVSVΔG, encoding the HIV-1 receptors and CX40 ligand. The co-infected cultures were harvested daily post-VSV infection. The cells obtained were analyzed for levels of the HIV-1-infected cells by counting the number of live cells or flow cytometry, and the supernatant fluids obtained were tested for levels of HIV-1 p24 by ELISA or Western blotting.

Results: While mock or VSVΔG infection showed no effects on the number of or the level of HIV-1-infected cells, infection with VSV-CX4 or VSV-CX4XL markedly reduced it. Importantly, infection with VSV-CX4XL showed more efficient reduction than that with VSV-CX4. In addition, mock or VSVΔG infection did not decrease the levels of p24 and the HIV-1-titers, but infection with VSV-CX4XL significantly inhibited the HIV-1 production as compared to that with VSV-CX4.

Conclusions: These results suggest that CX40 could be a target molecule for the anti-HIV-1 therapy and indicate that the rVSVΔG encoding the HIV-1 receptors and CX40 may have a potentially greater therapeutic value than the rVSVΔG encoding the HIV-1 receptors alone.

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MOPE0029

CD4 mimic compound-mediated enhancement of the neutralization activities of anti-V3 and CD4i monoclonal antibodies against the standard panel of primary isolates

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Background: The cryptic nature of the epitopes for neutralization in envelope glycoprotein (Env) trimericity is associated with neutralization resistance of primary isolates. To elucidate neutralization-enhancing effect of a small molecule that mimics CD4-binding to gp120 we examined IC50 value of a panel of monoclonal antibodies (MAbs) against the standard virus panel B (SVPB).

Methods: We used a CD4 mimic small molecule YAA-021 (a derivative of KD-247 and 717G2b, three CD4bs MAbs, 0.5δ, 49G2 and 82D5 together with two CD4i MAbs 4E9C and 4C11. Significant enhancement in neutralization was observed 9 out of 12 viruses for 0.5y, 5y for KD-247, 6 for 717G2b, 5 for 0.5δ and one for 4C11. Only marginal enhancement was detected for CD4bs MAbs in the presence of YAA-021. A series of ELISA to detect the binding of the MAbs to the monoclonal Env further supports the effect of the compound on the trimer complex.

Conclusions: These results suggest that YAA-021 could enhance the expo-
sure of epitopes that had been occluded inside the Env trimer in primary isolates and have an important implication in the development of novel therapeu-
 tic strategy.

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MOPE0030

Second-generation Tre recombinase for HIV-1 covalial DNA excision

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Background: Current treatment for HIV infection consists of highly active antiretroviral therapy (HAART), which effectively keeps the virus in check and inhibits progression to AIDS. However, as the viral DNA is covalently inte-
 grated into the host genome as a provirus, HAART cannot clear a patient from HIV. We recently engineered a recombinase (named Tre) tailored to efficiently degrade the provirus from HIV-1 infected cells by specifically recognizing target sites (lox) within the viral long terminal repeats (LTRs). Here we describe an improved second-generation Tre which displays enhanced enzymatic activity.

Methods: The previously described first-generation Tre recombinase had been obtained from a library engineered by substrate-linked protein evolution. By subjecting that first-generation library to several additional evolution cycles and DNA shuffling, a second-generation recombinase was generated. Recombinases isolated from that library where tested for enzyme activity and target specificity in both HIV-1 and SIV infection.

Results: An improved Tre recombinase that featured a significantly increased enzymatic activity was developed. While mock or VSVΔG infection showed no effects on the number or the level of HIV-1-infected cells, infection with VSV-CX4 or VSV-CX4XL markedly reduced it. Importantly, infection with VSV-CX4XL showed more efficient reduction than that with VSV-CX4. In addition, mock or VSVΔG infection did not decrease the levels of p24 and the HIV-1-titers, but infection with VSV-CX4XL significantly inhibited the HIV-1 production as compared to that with VSV-CX4.

Conclusions: These results suggest that YYA-021 could enhance the expo-
sure of epitopes that had been occluded inside the Env trimer in primary isolates and have an important implication in the development of novel therapeu-
 tic strategy.

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MOPE0031

Spray dried PCL-efavirenz nanoparticles for improving the current HIV/AIDS treatment

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Background: South Africa (SA) is one of the countries adversely affected by the HIV/AIDS epidemic. According to recent reports, USAID intends to cut spending on SA AIDS treatment and this would regress the fight against AIDS (1). Presently, 40% of the South African HIV/AIDS budget goes towards the cost of antiretroviral (ARV) drugs. Nanotechnology-based drug delivery has shown to hold promise in improving treatment for diseases such as cancer and has been successfully employed. Due to their high toxicities and unpleasant side effects, many patients do not adhere to the ARV treatment. Furthermore, in the case of TB/HIV co-infection, some ARV therapies are not compatible with the TB regimen due to shared toxicities and drug interactions. Thus, the main objective of this work was to encapsulate efavirenz (EFA) in polycaprolactone (PCL) using a scalable spray drying technique, in order to reduce total dose of drug administered and could potentially improve patient compliance.

Methods: The hydrophobic ARV drug, EFA, was encapsulated in PCL polymer via a double emulsion spray drying technique using organic solvents such as ethyl acetate (EA) or dichloromethane (DCM). PCL-EFA nanoparticles were then evaluated for particle size analysis, encapsulation efficiency (EE) and surface morphology. In addition, the in vitro drug release was also studied.

Results: Nanoparticles with an average size of 220.6 ± 0.950 nm in the case of EFA were obtained compared to DCM. This work offers an alternative to the in vitro drug release study will be discussed.

Conclusion: More than 60% was achieved in different nano-formulations. The result of EA were obtained as compared to 372.1 ± 19.96 nm for DCM. An EE of 83.2 ± 5.74% was achieved compared to 24.6 ± 3.96% for DCM. These results demonstrated that it was possible to encapsulate efavirenz (EFA) in polycaprolactone (PCL) using a scalable spray drying technique, in order to reduce total dose of drug administered and could potentially improve patient compliance.

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MOPE0032
Activity of the next generation integrase inhibitor S/GSK1349572 and two first generation inhibitors across a broad panel of HIV subtype isolates in PBMCs and MDMs
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Background: S/GSK1349572 is a next generation once daily unboosted integrase inhibitor (INI) that is currently in Phase2b clinical studies. S/GSK1349572 and two first generation INIs were tested against a broad panel of HIV isolates in PBMCs and monocyte-derived-macrophages (MDMs). In addition, S/GSK1349572 and one first generation INI were separately tested against 13 subtype B isolates.

Methods: Twenty-five HIV-1 isolates including at least three from each group M subtype (A-G) and from group O and three HIV-2 isolates were assayed in PBMCs. Four HIV-1 isolates were also evaluated in MDMs. PBMC assays were run with Ficol™ fractionated cells and used an RT endpoint. MDM assays were run with cells purified from Ficol™ fractionated blood samples via plate adherence and used a P24 endpoint. The susceptibility of 13 subtype B isolates was determined with Monogram Biosciences RHIN PhenoSense™ assay.

Results: S/GSK1349572 had sub nM IC50s against Group M subtypes A-G (means from 0.22-0.62nM), Group O (mean of 0.87nM), and HIV-2 (mean 0.29nM) isolates in PBMCs. Similar IC50s were observed in MDMs (mean 0.76nM). The first generation INIs RSC-1838 and S/GSK634735 had low nM IC50s against subtypes A-G (means from 1.2-3.65 and 1.31-1.97), Group O (means of 3.04 and 2.31), HIV-2 (means of 2.36 and 2.03), and in MDMs (means of 2.8 and 7.39). No differences between subtype susceptibility were apparent. In the PhenoSense assay, mean (range) nM IC50s were 0.52 (0.41-0.6) for S/GSK1349572 and 3.05 (1.6-3.8) for S/GSK634735.

Conclusions: S/GSK1349572 was highly potent, with sub nM mean IC50s against HIV in all assays. First generation INIs RSC-1838 and S/GSK634735 were less potent, with low nM IC50s. The antiviral activity of all three INIs was independent of HIV subtype, and was T cell and MDM independent. These observations support further clinical development of S/GSK1349572 across all HIV-1 subtypes.

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MOPE0033
Development of single-domain antibodies against the ENV protein to inhibit HIV infection of CD4+ cells
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Background: The interaction of gp120 with CD4 is the first step of HIV cycle. It is a potential allowing the entry of HIV into CD4+ cells. Gp120 is the main target for broadly neutralizing antibodies (bNAbs) but most of its accessibility is of the virus is hidden and thus, HIV can bypass these bNAbs. Since single domain antibodies (sdAbs) of llamas have the useful feature of binding antigen without requiring variable domains pairing, they are able to bind unconventional epitopes, like those present in protein cavities. Their small size allows them to access to very narrow space, like between virus and cell membranes after the bound of HIV to CD4. SdAbs are small and highly stable, and therefore easy to clone and produce in large amounts.

Methods: We immunized two llamas with trimeric form of gp140 (gp120 + transmembrane part of gp41). We selected llama-derived sdAbs sequence is very closed to the human VHIII sequence, which present a very low immunogenicity and so it may also be considered as stable, and therefore easy to clone and produce in large amounts. A stable, and therefore easy to clone and produce in large amounts.

Conclusions: Llama-derived sdAbs sequence is very close to the human VHIII sequence, which present a very low immunogenicity and so it may also be considered as stable, and therefore easy to clone and produce in large amounts. Through this study, we wished to establish a further mechanistic basis for the discordance observed in subtype C HIV-1 infected individuals and in tissue culture. We immunized each llama either with the trans-membrane part of gp41. We immunized each llama either with the trans-membrane part of gp41. We immunized each llama either with the trans-membrane part of gp41. We immunized each llama either with the trans-membrane part of gp41. We immunized each llama either with the trans-membrane part of gp41.

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Preclinical development of microbiocides MOPE0034
Developing an RNAI-based microbiocide against HIV: CD4 aptamer-siRNA chimeras inhibit HIV-1 infection in primary cells in vitro, in vivo, and human cervical explants ex vivo, and in both rhesus macaques and humanized BLT mice in vivo
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Background: The therapeutic use of small interfering RNAs (siRNA) to prevent or treat HIV infection requires an effective means for in vivo delivery into susceptible target cells. Aptamers, small structured nucleic acid sequences that bind with high specificity to individual proteins, provide an attractive approach for cell-specific targeting.

Methods: We designed chimeric RNA, which was transcribed in vitro and complexed with the complementary 21-nucleotide active siRNA strand. We hypothesized that the partially-duplexed RNA would be selectively internalized into CD4+ cells, and subsequently processed into an active siRNA capable of silencing target genes.

Results: Internalization of Cy3-labeled aptamer-siRNA chimeras was restricted to those cells expressing CD4. Functional silencing was verified in primary cells in vitro and in humanized BLT mice in vivo by showing robust knockdown of host genes (e.g. CCR5, CD45 & lamin), at both the protein and mRNA level. To investigate whether this system could be used to suppress HIV infection, CD4-chimeras were designed to encode siRNAs targeting the viral genes gag, and the HIV co-receptor, CCR5. These, when used alone or in combination with one another, inhibited HIV infection in both macrophages and CD4+ T-cells by 60-90%. Efficient silencing of target gene expression after topical chimera treatment was also demonstrated in an ex vivo model of sexual transmission using polarized human cervical and MDMs, all of which showed dramatic inhibition of HIV replication. Importantly, chimera treatment was non-cytotoxic to treated tissues and did not elicit an interferon-mediated inflammatory response.

Conclusions: Our data suggests that aptamer-siRNA chimeras could be an effective, cell-type specific therapeutic gene silencing approach to topically prevent sexual transmission of HIV, providing the framework for developing an HIV microbicide using RNAI-technology that is economical, easily produced, and amenable to use in resource-poor settings.

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MOPE0035
The role of dislocation mutagenesis and RNA secondary structure in the development of the K65R mutation in subtype B and C HIV-1
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1McGill University, AIDS Centre, Montreal, Canada, 2McGill University, Microbiology and Immunology, Montreal, Canada, 3McGill University, Medicine, Montreal, Canada, 4Background: Recent data from our group suggest that a template-based mechanism is responsible for the rapid emergence of the K65R mutation observed in subtype C HIV-1 infected individuals and in tissue culture. Through this study, we wished to establish a further mechanistic basis for these observations and what impact RNA secondary structure might have on K65R development.

Methods: Recombinant subtype C and B HIV-1 RT enzymes were expressed and purified using E. coli cells. Gel-based nucleotide extension assays were used to study DNA synthesis with various primer and template combinations. RNA secondary structure prediction and analysis were performed using the Mfold program.

Results: The presence of a pause site at a homopolymeric region in the subtype C HIV-1 template is responsible for higher K65R rates. When using a primer/template system containing the mutagenic nucleotide on the primer, the subtype C template produced a larger amount of K65R-containing DNA transcripts than did the subtype B template (40% vs. 38% after 120 minutes). When using a primer/template system to evaluate the direct incorporation of the incorrect nucleotide on both templates, the subtype C template again produced a larger amount of K65R-containing DNA transcripts than the subtype B template (40% vs. 14% after 120 minutes). Similar results were obtained regardless of the substrate source of the RT enzyme used, and a DNA synthesis pattern characteristic of dislocation mutagenesis was observed only with the subtype C template. RNA secondary structure predictions predicted that the K65 region is in an unplanned loop atop a paired stem structure for both subtype B and C.

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Conclusions: Through these findings, we show that dislocation mutagenesis is responsible for the higher rates of K65R development in subtype C HIV-1 and that this secondary structure is unlikely to influence such observations.

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MOPE0036

In vivo evolution of resistance associated mutations at Raltegravir failure and after therapy interruption: comparative genotypic and phenotypic analyses

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Background: Retrativegravir (RAL), the first licensed integrase inhibitor has provided a novel option to treat HIV-1 infected patients. However, a dynamic population of resistant viral variants is selected during failure. Thus, it is essential to investigate the evolution of the integrase gene during failure, and after RAL interruption.

Methods: Donal phenotypic analyses were performed on sequential HIV-1 integrase sequences amplified from 17 patients failing a RAL-based regimen (13 RAL failure) and sampled on days 2-24 for 120 weeks. Fully replicating recombinant viruses were generated using proviral vectors modified with a cloning cassette in the integrase gene to contain viral sequences amplified from patients' plasma. Resistance to RAL and the replicase capacity (RC) were evaluated on purified CD4+ T cells obtained from healthy donors.

Results: In all patients failure was associated with mutation signatures in positions 143, 148 or 155. A wide range of resistance levels to RAL (from 10 to 70% compared to baseline). A complete reversion to the wild-type HIV-1 integrase sequence was observed between 4 and 36 weeks after RAL withdrawal in all patients, with the exception of one patient, for 4.

Conclusions: The main force of the continuous evolution of the integrase gene during failure was the level of RAL resistance. Resistant variants showed a modest reduction of RC compared to wild-type viruses. However, the majority of patients revert to wild-type virus after RAL interruption within a few weeks and under different therapy regimens. In a few patients, complete reversion was not observed, and either primary, or secondary resistance mutations were only poorly influenced in their RC, with a reduction between 0 and 70%.

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MOPE0037

Transduction of CD4+ T lymphocytes by the retroviral vector expressing an Escherichia coli endoribonuclease MazF induces cellular resistance to HIV-1 replication

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Background: HIV-1 gene therapy appears highly desirable today, in the light of the limitations of current antiretroviral therapy such as long-term toxicity, emergence of drug-resistant HIV-1 variants, and inability to eradicate infection. Recently, Escherichia coli endonuclease MazF was discovered to cleave mRNAs at ACA sequences. HIV-1 genome has more than 240 ACA sequences. To destroy HIV-1 RNA in infected cells, rendering them virus free.

Methods: The full potential of this new approach depends on the assembly of artificial meganucleases distinctively cleaving the viral sequences. We have developed a semi-rational approach to redesign the DNA-binding interface of the T-Cre meganuclease, enabling us to tailor novel endonucleases cleaving chosen sequences with high specificity. These proteins keep the essential properties of natural meganuclease in terms of activity and specificity.

Results: We have produced several meganucleases targeting the HIV-1 proviral DNA. These proteins were screened for activity in yeast and mammalian reporter systems to determine their ability to carry a double strand break in extrachromosomal targets. Several endonucleases with good cleavage properties could be identified. In order to test the potential of meganucleases on a provirus, we have developed an assay that directly monitors proviral integrity. Using this system, we could detect a significant antiviral activity with several meganucleases.

Conclusions: Meganucleases targeting the HIV provirus represent a novel therapeutic strategy which mimics the cleavage of foreign DNA by restriction enzymes in bacteria. In this way, they can be considered as new tools of molecular medicine, with the potential to eradicate HIV infected cells or create a population of cells protected from HIV infection.

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MOPE0038

The use of photo-labelled non-nucleoside reverse transcription inhibitors of HIV-1 to inactivate viral replication capacity

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Background: We describe a new methodology for the potential development of an inactivated HIV vaccine using targeted photo-inactivation of HIV reverse transcriptase (RT) with preservation of conformational integrity of viral surface proteins.

Methods: An azido (-N3) group was introduced into each of a nevirapine analog (NVPa), and a dapivirine analog (DPVa), creating photo-active NNRTI analogs PA-NVPa and PA-DPVa. HIV-1 NL4-3 wild-type virus was attached to surfaces of 96-well plates using solid phase immobilization. Plates coated with poly-L-lysine, were incubated 1hr with NL4-3 and washed. The photoactive analogs PA-NVPa or PA-DPVa were then incubated with HIV-1 1-2 hrs and exposed to ultraviolet (UV) light, irreversibly causing cross-linking to the HIV-1 RT. Plates were then washed to remove unbound compound. 2 or 10% human foreskin fibroblasts were added to the wells in 10% RPMI and cultured for 3 to 10 days. Supernatant samples were collected at various times for p24 and RT assays.

Results: IC50 for NVP, PA-NVPa, DVP, and PA-DPVa were determined in MT-2 and PM-1 cells infected with HIV-1 NL4-3 wild type. Both the unmodified and modified compounds inhibited replication in a similar concentration range indicating that addition of the photo-active moiety did not alter the antiviral activity. Although the PA drugs were present only during pre-treatment of the virus they did reduce replication compared to control (ANOVA p= 0.0001). The PA-NVPa compound significantly reduced viral infectiousness (+ 75%) and lowered viral RT activity in situ by >99%. The PA-DPVa compound completely inhibited both viral RT activity as well viral infectiousness in susceptible target cells.

Conclusions: These findings illustrate that treatment of HIV-1 with PA-modified NNRTIs, in particular PA-DPVa, together with UV irradiation, can inactivate HIV-1.

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MOPE0039

Meganucleases targeting the HIV1 genome: a novel strategy aiming viral eradication

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Background: The majority of current HIV treatments target virally encoded proteins, allowing to increase the lifespan of infected individuals and converting HIV infection into a chronic disease. Meganucleases belong to a family of sequence specific endonucleases recognizing large cleavage sites in living cells. Tailored meganucleases targeting the HIV-1 genome may represent a novel class of antiviral agents that could cleave and partially excise or eliminate viral DNA from infected cells, rendering them virus free.

Methods: The full potential of this new approach depends on the assembly of artificial meganucleases distinctively cleaving the viral sequences. We have developed a semi-rational approach to redesign the DNA-binding interface of the T-Cre meganuclease, enabling us to tailor novel endonucleases cleaving chosen sequences with high specificity. These proteins keep the essential properties of natural meganuclease in terms of activity and specificity.

Results: We have produced several meganucleases targeting the HIV-1 proviral DNA. These proteins were screened for activity in yeast and mammalian reporter systems to determine their ability to carry a double strand break in extrachromosomal targets. Several endonucleases with good cleavage properties could be identified. In order to test the potential of meganucleases on a provirus, we have developed an assay that directly monitors proviral integrity. Using this system, we could detect a significant antiviral activity with several meganucleases.

Conclusions: Meganucleases targeting the HIV provirus represent a novel therapeutic strategy which mimics the cleavage of foreign DNA by restriction enzymes in bacteria. In this way, they can be considered as new tools of molecular medicine, with the potential to eradicate HIV infected cells or create a population of cells protected from HIV infection.

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Abstract Book Volume 1 | www.aids2010.org

61
MOPE0040
Inhibition of HIV-1 replication by shRNAs against strategic targets of the nef viral gene
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Background: RNA interference (RNAi) is a conserved antiviral and gene-expression regulation system. RNAi gene silencing is mediated by double strand-ed small interfering RNA (siRNA) oligonucleotides, which cleavage only exact complementary mRNA. Several HIV-1 genes have been efficiently targeted by artificial siRNAs. However, due to the high mutuation rate of the HIV-1 genome, viral escape mutants are rapidly induced. Essential proteins for viral replication should work at a wide extent of strongly selected mutated variants. Conversely, siRNAs targeting of DNA coding for proteins conferring viral virulence but not essential for replication, should induce low virulence escape mutants which are under lower selective pressure. Strategic selection of targets may attenuate this phenomenon or produce durable, mutated, mutant strains. Nef is a viral virulence protein, non-essential for replication. In this work we selected strategic siRNA targets, defined by conservation and/or functionality of the domains coding for the target sequence of the nef gene were identified in the polyuridine tract, the myristoylation signal, the proline-rich motif and the diversity region.
Methods: Nine siRNAs against these nef regions were chosen and designed by hand due to restrictions imposed by the computational algorithms. Oligonucleotides coding for shRNA sequences were cloned into a Fpol III promoter-containing plasmid and transiently co-transfected into HeLa T4 cells with a Nef-deficient reporter vector. The shRNA efficiency was evaluated by flow cytometry, Western blot and qRT-PCR.
Results: Highly efficient shRNAs against the proline-rich motif (two siRNAs with more than 95% of inhibition efficiency), myristoylation signal (1 with 95%), dimerization region (two with 95%) and the Polyuridine tract (1 with 85%) were identified.
Conclusions: In short, it is possible to design efficient siRNA against short strategic regions of the HIV-1 genome, which are apparently not suitable according computational algorithms. Our plasmids expressing shRNA against HIV-1 genes were generated by this approach may be improved candidates for avoiding induction of escape mutants.
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MOPE0041
Development of a new class of dual-targeted antiviral agents active against HIV-1 and HSV-2
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Background: HSV-2, one of the most common HIV-1 coinfections, is involved in a biological synergy with HIV-1. It establishes with HIV-1 a vicious circle in which each virus facilitates the replication, shedding, and acquisition of the other. We recently discovered that the triphosphate form of the antiviral agents active against HIV-1 and HSV-2.
Methods: We measured the magnitude and breadth of neutralizing activity in sera from 46 antiretroviral therapy naive HIV-1 clade C infected individuals: 30 chronic (<5yrs) and 16 long-term non-progressors (>10yrs), CD4 >500 cells. Neutralization was measured in a single round infection assay in T2M-1 cells using a multitype panel of Env-pseudotyped viruses from different locations. Pearson’s correlation coefficients were calculated to estimate the relationship between neutralizing serum dilutions and HIV-1 RNA levels using linear regression.
Results: We found that ACV ProTides inhibited HIV-1 in human lymphoid and cervico-vaginal tissues ex vivo in a dose-dependent manner, with an EC50 varying from 0.1 to 1 µM. In CEM and MT-4 cell cultures, the EC50 values ranged from 1.7 to 12 nM. None of the ACV ProTides depleted CD4 or CDB T cells or their various cell subsets, in particular naïve or memory T cells or cyt-dying cells in human tissues ex vivo. The 50% cytotoxic concentration in MT-4 cell cultures was greater than 150 µM. As expected, ACV ProTides retained potent activity at high concentrations, without affecting the target-resistant or resistant to native ACV.
Conclusions: ACV ProTides were found to strongly suppress HIV-1 in vitro. Since ACV ProTides preserve the anti-herpetic activity of ACV including th- altered virus strains, these compounds represent a new class of antiviral agents that dual-target HIV and HSV-2, viruses that are commonly associated in the genital tract.
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MOPE0042
Recombinant proteins carrying peptide mimetics recognized by broadly neutralizing anti-HIV-1 mAb 2G12 as a candidate vaccine
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Background: An AIDS vaccine is unlikely without a solution to the HIV neutralizing antibody problem. An artificial polypeptide protein TBI (T and B cell epitopes containing immunogens) was created in our institute to this purpose. It contains 4 T-cellular and 5 B-cellular linear epitopes from Env and Gag HIV-1 proteins. Immunization of monkeys and mice by such protein elicited HIV-specific immune response.
Methods: MAb 2G12 neutralizes HIV by binding with high affinity to a cluster of high-mannose oligosaccharides on the envelope glycoprotein, gp120. It was decided to improve polypeptide protein TBI including in its structure mimetic of conserved immunogenetic determinants recognized by mAb 2G12. Phage display was used to obtain peptides mimicking a HIV-1 gp120 conformational epitope recognized by virus-neutralizing mAb 2G12. The oligonucleotides, coding for the selected peptide mimetics were synthesized and cloned onto the TBI gene. Balb/c mice were immunized with the new recombinant TBI proteins.
Results: We have obtained 3 recombinant TBI proteins containing peptide mimetics recognized by 2G12. The antigenic properties of recombinant TBI proteins were characterized by immunoblot and ELISA. Antibodies to gp120 were detected in the sera of immunized animals. The virus-neutralizing activity of the sera were examined.
Conclusions: Thus, new recombinant TBI proteins which possess antigenicity and immunogeneticity of peptide mimetics of 2G12 mab were obtained. These proteins are expected to be promising as a component of HIV vaccine.
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MOPE0043
Robust broadly neutralizing antibody responses in a subset of HIV-1-infected individuals in Chennai, India: potential avenues for vaccine design
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Background: Broadly neutralizing monoclonal antibodies (NAbs) against gp120 (e.g. 2G12 and 3BNC117) have been described. The evolution and specificities of broadly NAbs generated during the course of HIV-1 infection in distinct geographical locations may provide information to facilitate the design of an effective vaccine for the world.
Results: We measured the magnitude and breadth of neutralizing activity in sera from 46 antiretroviral therapy naive HIV-1 clade C infected individuals: 30 chronic (<5yrs) and 16 long-term non-progressors (>10yrs), CD4 >500 cells. Neutralization was measured in a single round infection assay in T2M-

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MOPE0044
Development of monoclonal antibodies neutralizing IgA specific of the C-terminal region of gp41 of HIV-1
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Background: The C-terminal region of the envelope glycoprotein 41 of HIV represents the target for the development of HIV vaccine. This region contains three major domains (MPER, TM and Kennedy epitope) involved in the anchoring and the fusion of the virus to its target cells. MPER contains the epitopes of the three broadly neutralizing monoclonal antibodies (NbAbs) (2FS, 4E10 and 213E) used in passive sorotherapy approaches. In most of these models, studies indicate that high immunoregulation concentrations of NbAbs are required to provide significant benefit in protection experiments. In this regard, one of the important challenges on the HIV vaccine is to induce broadly NbAbs at the mucosal site.

Methods/results: The aim of this work is to construct new conformational tools to identify new potent mucosal-specific epitopes and produce therapeutic mucosal NbAbs which could be used as prophylactic or therapeutic molecules. In this study, we used human cell lines expressing the native gp41 membrane-bound molecule or more specifically the MPER domain. This new tools have been used to screen specific IgA responses in parodid saliva or lactoarea of HIV infected patients. Some of the cells lines are also currently used as immunogen for the production of chimeric human IgA, in a specific transgenic humanized mouse model. We show that mucosal compartments contains IgA with recognize conformational and not linear epitopes.

Conclusions: We found that the use of conformational epitopes as immunogen could improve drastically the efficacy of IgA NbAbs.

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MOPE0045
Correction of deficient class-switched antibody response to the CD4 binding site by covalent immunization
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Background: Effective HIV vaccination will require the development of an immunogen capable of inducing class-switched, affinity matured antibodies directed to a conformational site that the virus needs for its propagation. The CD4 binding site (CD4BS) of gp120 fulfills these requirements, but no vaccine candidate has included a native gp41-CD4BS antibody response.

Methods: Antibodies were purified from sera of humans infected for 0.5-5.5 years with HIV, mice immunized with full-length gp120 or mice immunized with gp120 containing electrophilic phosphonate groups that bind covalently to B lymphocytes (gp120-CHR, gp120-CHR, gp120-CHR). Binding was measured by ELISA using gp120 or the electrophilic mimetic of gp120 residues 416-433 (E-Cys-p416-433). E-Cys-p416-433-sensitized CD4+ T cells found specific antibodies in the same sera were mostly IgM, the first antibody class secreted by B lymphocytes. The IgG fraction of these sera were analyzed for their capacity to inhibit the CD4 binding antibodies of the same sera. No antibodies were found specific to CD4BS antibodies.

Results: Consistent with a fully mature immunoregulation, full-length gp120 binding by sera of HIV-infected humans and mice immunized with gp120 was dominated by IgG antibodies. The CD4BS binding antibodies of the same sera were mostly IgM, the first antibody class secreted by B lymphocytes. The IgG fraction of these sera were analyzed for their capacity to inhibit the CD4BS antibodies of the same sera. No antibodies were found specific to CD4BS antibodies.

Conclusions: HIV and gp120-induced antibody response characterized by deficient anti-CD4BS IgM-anti-CD4BS class switching, accounting for the rare natural generation of neutralizing anti-CD4BS antibodies. The immune response to other gp120 epitopes proceeds to full maturation. The class-arrested IgM deficient anti-CD4BS antibodies. The CD4BS binding antibodies of the same sera were mostly IgM, the first antibody class secreted by B lymphocytes. The IgG fraction of these sera were analyzed for their capacity to inhibit the CD4BS antibodies of the same sera. No antibodies were found specific to CD4BS antibodies.

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MOPE0046
Focusing the immune response on HIV-1 neutralizing competent envelope epitopes using cholera toxin B, a carrier with mucosal adjuvant activity
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Background: The induction of broadly neutralizing antibodies (NbAbs) against HIV-1 is essential for effective vaccination. Complete envelope proteins, usually present the epitopes of NbAbs. Unlike short envelope peptides fused to a mucosal adjuvant carrier directly display their epitope to the immune system. Cholera toxin B (CTB), the non toxic part of cholera toxin, is known to be a mucosal adjuvant and safe for use in humans.

Methods: Chimeric CTB constructs were designed according to the codon usage of E.coli. The affinity purified proteins were analyzed by SDS-PAGE, Western blot and functional ELISAs. Immunisation studies were performed in female BALB/c mice.

Results: A novel adaptation of the coding sequence to frequently expressed genes in E.coli, production of the proteins was optimized in a special expression strain. The purified proteins show functionality in terms of the binding of CTB to GM1 which is essential for directing the fused envelope epitope to the mucosal immune system. Furthermore the epitopes are specifically recognized by broadly neutralizing NbAbs. Focusing the immune response on the epitopes as well as the adjuvant activity of CTB are analysed in immunisation studies in BALB/c mice.

Conclusions: Neutralizing competent HIV-1 envelope with strong affinity to NbAbs carried by the mucosal adjuvant CTB might be a powerful tool to promote the development of a potent vaccine against HIV.

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Cellular immunity based vaccines
MOPE0048-MOPE0049

MOPE0047
HIV-1 gp41 derivatives presented on virus-like particles induce high antibody titers directed against the membrane-proximal external region (MPER)
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Background: The induction of broadly neutralizing antibodies (bNAbs) against the envelope protein is thought to be a key to an effective vaccine against HIV to prevent the virus from accessing the immune system. bNAbs are the most potent known neutralizing monoclonal antibodies. As HIV-1 virus-like particles (VLPs) provide a natural membrane setting for gp41-derived proteins, we take advantage of VLPs as carriers for membrane-anchored, truncated gp41 as immunogens.

Methods: Several versions of gp41 including the C-terminal heptad repeat (CHR), MPER, membrane domain and a shortened cytoplasmic tail were designed and characterised. All gp41 derivatives were expressed in a human cell line and incorporated into VLPs. Immunization studies were carried out using a heterologous DNA prime VLP boost regimen.

Results: Most of these constructs show enhanced binding to bNAbs 2FS and 4E10 compared to full-length gp160 and similar binding compared to full-length gp41, as measured in FACS analysis and VLP capture assays. Also the most truncated version of gp41 still seems to be properly transported to the cellular membrane and recognized by bNAbs 2FS and 4E10. In our immunization study, very high dilutions (up to over 100,000 fold) of IgG immune sera showed specific binding to the corresponding MPer peptide in ELISA readout.

Conclusions: Thus, we created novel gp41-derived immunogens with preserved binding sites for bNAbs, which induce very high antibody titers against the MPER in rodents. The neutralization capacities of these sera are currently investigated in a TZMBL and FMV immune neutralization assay.

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MOPE0048
Identification of HIV-1 peptide sequences associated with the induction of protective T cell immunity across different two clade B infected host populations
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Background: We have recently identified specific CTL to HIV-1 overlapping peptides (OLP) associated with relative in vivo HIV-1 control by testing a cohort of 223 HIV-1 Clade B subjects in Lima, Peru. OLP-specific protective ratio (PR) was calculated as the ratio of the median viral load in OLP non-responders versus OLP responders.

Methods: To test if the viral data could be translated into a genetically unrelated cohort, immune responses to the most and least protective OLP were used in a similar analysis. The ratio of the median viral load in OLP non-responders versus OLP responders was used in a cohort in Barcelona, Spain.

Results: A direct association between the PR and the sequence conservation of the OLP was observed (p=0.0036). Responders to OLP with higher PR...
values showed a broader HLA class I allele heterogeneity. HIV-1 controllers showed significantly more responses to protective OLP compared to non-controllers (p=0.001) and mounted responses of significantly higher magnitudes (p=0.001). In addition, CTL responses to regions covered by OLP with higher PR values showed greater avidity in controllers compared to non-controllers. Finally, T cell lines specific for protective OLP showed a superior ability to inhibit in vitro viral replication compared to T cells targeting non-protective OLPs.

Conclusions: Data generated in Peru regarding protective CTL responses could be based on the DNA constructs that induced this response. The immunogenicity was improved by (i) re-introduction of the natural Gag-Pol frameshift allowing budding and release of Gag particles; (ii) introduction of Gag and Pol specific epitopes by insertional targeting of exogenous Gag sequences and PolNef expression on replication-competent plasmids; (iii) separation of Gag, PolNef and Env on different plasmids.

Methods: Recombinant NYVACs with the optimized immunogens were generated by homologous recombination. The immunogenicity was improved by administration. At present the modified NYVACs are evaluated in a comparable setting of almost exclusively Env specific T cells. This effect could be overcome by injection of Env and GPN in separate muscles or by a timely separated administration. At present the modified NYVACs are evaluated in a comparable immunization study.

Conclusions: In the DNA immunization study, the modifications of the immunogens increased Gag and Pol specific T cell responses compared to the GPN immunogens as used in the clinical trial.

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MOPE0049
HIV vaccine design to improve Gag, Pol, Nef and Env specific immune responses

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Background: Recently we generated HIV Vaccine candidates based on New-York-Vaccinia Virus (NYVAC). The primary goal of the study is to improve the inserted immunogens and compare these with a clinical trial lot of a NYVAC based HIV vaccine candidate. Expressing an artificial polypeptide consisting of Gag, Pol and Nef (GPN) as well as a secreted form of gp120 (Env).

Methods: Recombinant NYVACs with the optimized immunogens were generated by homologous recombination. The immunogenicity was improved by (i) re-introduction of the natural Gag-Pol frameshift allowing budding and release of Gag particles; (ii) introduction of Gag and Pol specific epitopes by insertional targeting of exogenous Gag sequences and PolNef expression on replication-competent plasmids; (iii) separation of Gag, PolNef and Env on different plasmids.

Results: BHK cells were infected with the different NYVACs and the expression of the transgenes was examined. For mouse immunization studies corresponding DNA-based constructs were generated and tested in Balb/c mice. Recombinant NYVACs with the modified immunogens increased the levels of Gag specific IFNgamma producing T cells. The injection of equimolar amounts of Gag and PolNef increased Pol specific responses, whereas Gag responses remained unchanged. Co-administering Env in a mixture with GPN or Gag largely abrogated Gag-specific responses and resulted in the induction of almost exclusively Env specific T cells. This effect could be overcome by injection of Env and GPN in separate muscles or by a timely separated administration. At present the modified NYVACs are evaluated in a comparable immunization study.

Conclusions: In the DNA immunization study, the modifications of the immunogens increased Gag and Pol specific T cell responses compared to the GPN immunogens as used in the clinical trial.

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MOPE0050
Conserved elements vaccine for HIV-1 Gag p24 is immunogenic in mice and macaques

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Background: We are developing a new, globally applicable HIV DNA vaccine that induces immune responses to highly conserved elements (CE) of the virus, while precluding responses against immunodominant decays, i.e., immunodominant decay of the virus is a biologic function, but which may absorb much of the host immune response. A prototype p24 vaccine is being tested in Balb/c and HLA-Tg mice and in macaques. Immune responses are being evaluated in HIV-infected humans, and induction of responses by exposure of human T cells to expressed human DC are being evaluated in HIV-infected humans, and induction of responses by exposure of human T cells to expressed human DC are being evaluated.

Methods: We engineered two HIV Gag p24 CE DNA immunogens (p24Core 1 and p24Core 2) that express T strictly conserved elements of the protein of amino acids or greater in length (≥98% conservation in HIV-1 M Group).

Results: Proteolytic processing of CE peptides revealed production of optimal epitopes or slightly extended epitopic peptides from 6 of the CE segments. Using electroporation for immunization, they generated strong, cross-clade T cell responses and humoral responses in mice. Gag-specific cellular immune responses have also been detected in immunized macaques. p24Core 2 induced Gag specific T cell responses against the natural HIV infection, including >30 epitopes restricted by >40 HLA alleles, and ELISPOT reactivities to several previously unknown epitopes. There was no difference in nuce was magnitude of responses between controllers (n=23) and non-controllers (n=21).

Conclusions: We are now generating CE immunogens from the entire HIV prototype, to generate complete, universal HIV immunogens targeted to the Achilles’ heel of HIV-1.

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MOPE0051
Induction of a humoral and cellular immune response against HIV-1 envelope presented on a single round infectious retroviral vector or a non-infectious presentations

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Background: Live attenuated HIV virus elicit protective immunity in test animals but due to safety concerns these are not suitable for human trials. We searched for an alternative and constructed a retroviral vector derived from the related simple gamma retrovirus Murine leukemia virus (MLV). Our in-\n
Method: The vector contains Akv-MLV cis-motifs, to facilitate virion packaging, reverse transcription, and target cell integration. A biocistronic transgene cassette encoding HIV env and egt is regulated by the MLV LTR. Vector-carrier complex 

Results: Particles pseudotyped with MLV Env, both infectious and non-infectious, induced strong humoral responses in mice. GPN antigenic nanoparticles allows single round infections in BALB/c mice. Inter peritoneal prime-boost vaccinations, incub. Cpgs, were carried out and the immune responses were assessed.

Results: Particles pseudotyped with HIV Env, both infectious and non-infectious, induced strong humoral responses in mice. gigulic nanoparticles allows single round infections in BALB/c mice. Inter peritoneal prime-boost vaccinations, incub. Cpgs, were carried out and the immune responses were assessed.

Conclusions: This HIV envelope delivery vector qualify for further investigation, especially in test animals with C242, i.e. dotyping with VSV-G or MLV Env can be omitted.

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MOPE0052
Novel vectors and strategies MOPE0050-MOPE0060

MOPE0050
Novel vectors and strategies to improve the biological activity of DNA vaccines

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Background: To improve the biological activity of plasmid DNA (pDNA) vaccines we have developed a synthetic formulation converting the pDNA into a “pathogen-like” nanomedicine that mimics the size, surface properties, cellular entry by endocytosis, endosomal escape, and gene expression features of pathogens (e.g, viruses), thus targeting antigen presenting cells of the immune system. Optimizing the structure of these nanomedicines is warranted to improve biological activity, develop stable formulations and establish a re-usable producing manufacturing technology.

Methods: We performed physico-chemical characterization of the pDNA/PEIm nanomedicine and systematically investigated the variability of vaccine components and their relationship with its structural components, in vitro biological activity and stability. We discovered a new biophysical property, the compactness (mea-
**MOPE0053**

**Use of secretory IgA to deliver HIV antigen in the intestinal mucosa**

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**Background:** The secretory IgA are important players in the humoral immune response against enteropathogens. The IgA have the very interesting feature to be able to cross the intestinal mucosa in both directions (through M cells and secretory IgA (sIgA) by transcytosis) to use these important properties of IgA in a vaccine approach to deliver a vaccine antigen in the GIT (Gut Associated Lymphoid Tissue) after mucosal administration.

**Methods/Results:** In this work, we describe first the important role of glycosylation in the interaction between human secretory IgA and M cells in a specific in vitro intestinal human model. Briefly, this model is based on a co-culture between Caco2 (human intestinal cells) and Raji (B cells lymphoma). We tried also to identify the domain of IgA2 involved in the reverse transcytosis, and if its transcytose is IgA2 restricted. Then, we have modelled the in vivo transport of IgA in the intestinal mucosa in an in vivo ligated loop model. Using specific fluorescent vehicles as nanoparticles, we have described an important network of antigen presenting cells which could uptake specific candidate for mucosal vaccination.

**Conclusion:** We think that such type of vaccines could be use as prophylactic approach to deliver Nabs induced by immunogen as gp41 glycopeptide.

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**MOPE0054**

**Auxo-GTU-multisIV DNA vaccine induces strong and durable SIV specific T-cell responses and results in protection against a lethal challenge with high dose of pathogenic SIVmac251**

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**Background:** We previously demonstrated that intradermal injection (ID) of the auxo-GTU-MultisIV DNA vaccine induces strong and durable (>3 years) anti-HIV T-cell responses in macaques. Immune activity was significantly enhanced when local electroporation (EP) was associated to ID injection. Here, we assessed efficacy of an equivalent auxo-GTU-MultisIV vaccine against SIV-macaque vaginal challenge in macaques.

**Methods:** The auxo-GTU-MultisIV vaccine encodes Gag, Tat, Rev and Env/Pol CTL epitopes of SIVmac239. Fourteen macaques were vaccinated with 1 mg of the vaccine at week 0, 4, and 12, either by the ID route (n=6), or by coadministration of ID and EP (ID+EP, n=8). Six animals of each group have been challenged similarly.

**Results:** At time of challenge, all animals raised SIV-specific T-cells as evidenced by IFN-γ ELISPOT. Local electroporation associated to ID injection enhanced the T-cell responses significantly earlier and at higher levels in both vaccinated groups when compared to controls. The best results were obtained in group vaccinated ID+EP: 3,898±395 spots/10⁶ cells in the ID only and ID+EP groups, respectively. Weak and transient antibody responses were detected. No specific T-cells were detected in mucosal biopsies. After SIVmac251 rectal challenge, T-cell responses increased significantly earlier and at higher levels in both vaccinated groups compared to controls. The best results were obtained in group vaccinated ID+EP: 2,989±395 spots 1 week post-challenge and up to 12,000 spots by week 2. During primary infection, SIV-specific IgG in serum was significant reduced (p=0.0093) in the ID+EP group. Differences in anti-Gag and anti-Rev responses may explain this observation.

**Conclusion:** Auxo-GTU-MultisIV vaccine induces strong and long lasting T-cell responses in macaques, similarly to what we observed with auxo-GTU-MultisIV vaccine. Electroporation associated to ID enhances vaccine immunogenicity. Significant control of uncloned pathogenic SIVmac251 was observed after single rectal challenge with a high dose of virus.

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**MOPE0055**

**RNA transfection of T cells with HIV-specific TCR, to obtain T cells recognizing HIV-epitopes**

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**Background:** It has been demonstrated that cytotoxic T lymphocytes (CTL) play a key role in keeping the viral load of HIV under control, and are assumed to protect HIV infected individuals. A potential immunotherapeutic strategy is the adoptive transfer of T cells, which are reprogrammed with TCR that specifically recognize antigen pre-presentation antigens and if its transcytose is IgA2 restricted.

**Results:** We transfected the TCR into CD8⁺ T cells by RNA electrotransfection (Electroporation) with recombinant retroviral plasmid transfections, and the HLA-B13 restricted epitope nef114.

**Conclusion:** It seems recognized antigen presenting cells (peptide-loaded target cells, or target cells presenting the den-glycosylated processed epitope) and responded with release of the pro-inflammatory cytokines IL-2, TNF-alpha, and IFN-γ simultaneously, upregulation of the activation marker CD25, and proliferation after stimulation. Even after transfection with low amounts of CD8⁺ T cells were capable to specifically lyse target cells (for at least three days). Moreover, the avidity of our reprogrammed T-cells with the parental CTL and demonstrated that the transfected T cells were only one order of magnitude lower in avidity compared to the parental CTL. Furthermore, the recognition pattern of mutant peptides by the parental clone was preserved in the TCR-RNA transfected T cells.

**Conclusions:** The presented TCR-RNA-transfection is a highly efficient technology. It can be used as an individual for both antigen presentation efficiency, and TCR functionality, or even as a possible therapy, because it is simple, secure, and more flexible (i.e., better evaluation of the transferred TCR) than retroviral transduction.

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**MOPE0056**

**Design of bicistronic and tricistronic poliovirus replicons as vectors for the production of HIV Gag/Env particles**

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**Background:** Live attenuated viruses have led to the best vaccine protection achieved in the Non human Primates / SIV model. However, this strategy cannot be considered for human use due to safety reasons, as live vaccines retain the capacity to integrate their genome in host cells, persist and revert eventually. Therefore, we need to find a new strategy to reproduce the protection capacity of attenuated vaccines. To this aim, we are developing models to produce a live chimeric virus composed of the structural protein from HIV and the non-structural proteins from poliovirus (PV). Such chimeric virus should replicate exclusively in the cytoplasm of infected cells and produce viruses morphologically similar to lentiviral particles.

**Methods:** Gag-GFP-Protease and Env genes were inserted into polio viral bicistronic or tricistronic replicons, in which PV polymerases were expressed under the control of the EMCV IRES. Expression of Gag/Env was measured after electroporation of HeLa cells with RNA replicons transcribed in vitro. Cells were co-expression of Gag and Env was assayed by semi-quantitative PCR. Replication kinetic and processivity of RNA constructs were analyzed by slot blot.

**Results:** Co-electroporation of Gag and Env bicistronic replicons or simple electroporation of Gag/Env tricistronic replicon allowed the production of Gag/ Env particles. Insertion of HIV encapsidation sequences between the 5’-codo- verleaf and PV IRES did not hamper replication of the replicon. However, no RNA encapsidation into Gag particles nor propagation of chimeric virus have yet been observed.

**Conclusions:** The use of PV derived replicons is compatible with the production of processed and mature HIV structural proteins but the presence of HIV LTR sequences is not sufficient to induce Gag encapsidation of the chimeric virus. Further studies will be necessary to obtain a self propagative chimeric virus.

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**MOPE0057**

**Adsorption of HIV gp140 onto poly-lactic acid (PLA) nanoparticles could unmask CD4bs epitope and induces long lasting immune responses in rabbit after subcutaneous administration**

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**Background:** The use of particulate adjuvant has already been widely described to induce strong humoral immune responses directed against HIV antigens, including Gag or Env. However, a precise investigation concerning the modification of antigenic formulation is still lacking and precludes a rationale design of a vaccine cocktail based on Env immunogens able to induce neutralizing antibodies. Therefore, we performed a systematic study using gp140 clade C and PLA nanoparticles as vaccines candidates.

**Methods:** After the optimized passive adsorption of the HIV gp140 (clade C CNS4) onto the PLA nanoparticles, a precise epitope mapping has been performed by ELISA using antibodies directed against gp120 or gp41 sub-unit.

**Results:** We characterized the exposure of each epitope after formulation to identify potential modification with regards to unformulated gp140. Then, immunogenicity properties of the PLA-gp140 formulations were evaluated in female rabbit by comparing subcutaneous and vaginal administration.

**Conclusion:** The gp140 protein was passively adsorbed onto PLA nanoparticles with a reproducible adsorption yield higher than 80%. Their colloidal stabilities were conserved at least 3 weeks at 4°C with a slow protein release (< 10%). The analysis of the epitopes exposure showed that CD4 binding site was more exposed when gp140 was adsorbed onto PLA nanoparticles than in free protein. The monitoring of the immune response in female rabbit model, both systemic and vaginal gp140 showed that the gp140-exposed epitopes were conserved at least 3 weeks after vaccination, but neutralizing activities were still weakly detectable.

**Conclusion:** The presented TCR-RNA-transfection is a highly efficient technology. It can be used as an individual for both antigen presentation efficiency, and TCR functionality, or even as a possible therapy, because it is simple, secure, and more flexible (i.e., better evaluation of the transferred TCR) than retroviral transduction.

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MOPE0058
Development of the DNA plasmid based genetic vaccines vectors, which use segregation/partitioning function of the bovine papillomavirus type 1
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Background: The performance of DNA vaccines in humans has been unsatisfactory. A likely reason for poor efficiency is low capacity of vectors for antigen expression in vivo.
Methods: We developed novel DNA vaccine vectors called Gene Transport Units (GTU®), which use segregation/partitioning function of the Bovine papillomavirus (BPV1). Into the plasmid with novel bacterial selection marker and optimized expression cassette for antigens, two additional elements were added: 1) the BPV1 E2 protein expression cassette and 2) multicistronic binding sites of the E2 protein. Expression of the gene of interest and E2 was directed either into the plasmid for unmutated and unmutilated nucleotides or into the plasmid with novel bacterial selection marker and optimized expression cassette for antigens. The properties of GTU® vectors for expression in different tissues of mice, swine and non-human primates were analyzed using gene gun, jet-injection, IM and ID needle injection delivery alone and in combination with in vivo electroporation.
Results: The features provided by the E2 protein and multicistronic E2 binding sites have a dual nature. First, the viral segregation/partitioning function increases the number of antigen-positive cells as a result of division of cells, therefore engaging larger number of cells for expression of the antigen as compared to unmutated and swine skin. Second, transcriptional activation provided by E2 and E2 binding sites increases expression of antigen at least 10 fold compared to the rest of the segments in the muscle. The GTU® vectors carry the novel auxotrophic selection marker and complete technology for production of large quantity of the cGMP quality of plasmid has been developed. The preparation has been optimized in five clinical trials with outstanding safety and efficiency profile. Currently GTU® vectors are safe and efficient for induction of humoral and cell-mediated immune response against HIV1 in humans. Presenting author email: mart.ustav@fitbiotech.com

MOPE0059
Recombinant foamy virus (FV) vectors used for HIV vaccines: initial report of animal studies
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Background: Foamy viruses (FVs) are endemic retroviruses in nonhuman primates but not in humans. Rare, persistent FV infection has been documented in animal handlers for up to 25 years without illness or disease but with both anti-FV humoral and cell-mediated immune responses. FVs have a large genome (>11 kb) including gag, pol and env genes and 3 unique open reading frames (ORFs). FV vectors have transducing characteristics superior to similar to lentiviruses.
Methods: Recombinant FV (PV) vectors using HIV-1 gag (FIVgag) and a CTL epitope GLU (FIVsGL) were developed at titers >105. Persistent expression of HIV-1 p24 antigen in THP-1 cells and without transgene detection or FIV-sGL was detected. Orderly processing of HIV-1 gag into p17 and p24 proteins by serial Western blots was accomplished. Two groups of 5, 6-week-old C57Bl/6 mice each have been immunized by IP injection with 2 x 106 infectious units of each PV vector; 2 mice with placebo. Mice have been followed over 24 weeks with every 2 week blood sampling and weekly FIV-sGL titers and week 24 (1/2) euthanasia and organ procurement.
Results: No mice died or appeared ill over the study period attributable to the vaccine. Detailed studies measuring plasma HIV-1 p24 antigen by EIA, anti-HIV-1 p24 antibody, mRNA extracted from PBMCs and ELISPOT studies of PBMCs to HIV-1 gag are currently underway and will be presented.
Conclusions: PV vectors have demonstrated promising in vitro results as candidates for HIV vaccines. The results from these first mice studies will further add to our knowledge of their utility. Presenting author email: david.hardy@cshs.org

MOPE0060
Using a recombinant equine herpes virus (EHV-1) to achieve protective characteristics induced by HIV-vaccines in the mouse-model
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Background: HIV has a small host range by infecting only humans and some nonhuman primates. Therefore no HIV-challenge is available for evaluating HIV-vaccine candidates in small animal models. So far, alternatively chimy-mice viruses containing components of HIV could be employed to give information about the cell-mediated protective immune responses. Moreover, mouse-pathogenic EHV-1 containing a codon optimised HIV-gag based on clade CND4 and a firefly-luciferase-gene as a reporter (BHV-L-luc-gag) is used to evaluate HIV-vaccine candidates in the mouse-model. The body weight and the luciferase expression level of living mice detected with a bioluminescent imaging are exploited as parameters for a protective immune response after a mucosal challenge. For confirmation lymphocytes of the lung and lymph nodes are analysed by FACS.
Results: BHV-L-luc-gag challenge is reflected by body weight loss of about 5 % of the infected Balb/c mice in contrast to non-infected animals two days after challenge and by clinical signs as ruffled coat and ruffled fur. Ad5-HIV-gagplasmid vaccinated Balb/c mice were challenged and differences to non-vaccinated mice in clinical scores and lesions of skin were observed. Nevertheless induction of mucosal and systemic Gag-specific CTLs in vaccinated mice were confirmed by FACS-analysis, surprisingly there was no improvement of clinical symptoms in mice intranasally vaccinated with Ad5-HIV-gagplasmid (CNS4). Challenge of intra-muscularly immunised mice resulted even in an increase of body weight loss and luciferase activity. This tendency of ad5-vectors to influence immune responses reflects the egress of former clinical trials.
Conclusions: Recombinant mouse-pathogenic EHV-1 is an interesting candidate for a readout system of immune responses in the mouse-model. Presenting author email: ralf.wagner@klinik.uni-regensburg.de

Viral determinants of SIV pathogenesis
MOPE0061-MOPE011

MOPE0061
Multiple KIR gene polymorphisms are associated with plasma viral loads in SIV infected rhesus macaques
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Background: Innate immunity mechanisms play a deterministic role in the rate of disease progression during acute infection in HIV infected human and SIV infection of nonhuman primates. There is a good correlation between functional activity of innate cells and Killer Immunoglobulin-like Receptor (KIR) genes. We have previously characterized genetic variations of KIR family in SIV-infected rhesus macaques (RMs) and identified an association of two KIR3DL alleles with a SNP 159H/Q and high plasma viral load (HVL). In this study, we have further characterized other KIR loci including KIR1D, KIR2DL4, KIR2DL5, and KIR3DH.
Methods: cDNA samples obtained from 18 SIV-infected RMs with HVL and 18 with low viral load (LVL) were amplified for 4 KIR genes by using our primer sets and were ligated into pGEM T vector. Plasmid was transformed into JM109 cells. A single positive colony was isolated, purified, and analyzed for DNA sequences.
Results: Among the KIR loci expressed in our RM cohort, we found 11 alleles from KIR1D characterized by the absence or presence of Immunoreceptor Tyrosine-based Inhibitory Motifs (ITIMs) in their cytoplasmic tail, 7 alleles from KIR2DL4, 14 alleles from KIR3DH separated into HVL-alleles and LVL-alleles, and 14 alleles from KIR3DL. Data from this study appear to show a strong correlation between SIV replication and KIR genotypes: KIR1D alleles with ITIMs, KIR2DL4 allele-1, KIR3DH that expressed ‘HVL’ alleles, and KIR3DL allele-13 and 14 that exhibited a SNP 159Q/H.
Conclusions: These data support the view that the genetic inheritance of select KIR alleles and their corresponding natural ligands of the MHC class I molecules may play a determinant role in the degree of immune suppression during acute infection period. This study was supported by the Yerkes National Primate Research Center, Emory University, USA, and the Thailand Research Fund-Senior Research Scholar and Royal Golden Jubilee Ph.D. program, Thailand.
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MOPE0062
BAC recombining as a new tool for generating stable and infectious HIV/SIV proviral constructs
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Background: Applying standard genetic engineering methods based on restriction sites highly is limited in the development of HIV/SIV constructs due to a high degree of sequence variation between different isolates and instability of proviral constructs and the necessity of maintaining the functionality of several polypeptides which are encoded by overlapping reading frames. Methods: Phase A RED recombination was used to stably assemble the SIVmac239 genome as bacterial artificial chromosome (BAC) in E. coli which can now further be modified at any target position by recombination. Results: The 10.3kb SIVmac239 genome was divided into 3 parts which could be assembled to a SIV BAC plasmid by a 3 step recombination process. The BAC plasmid DNA was used for transfecting eukaryotic cells and viral progeny was analysed for its replication capacity in CEM174-SEAP cells. BAC derived viruses were comparable in their replication kinetics to conventionally generated SIVmac239. A BAC recombination in a highly efficient and targeted manner. For this purpose
any 50bp sequence on the SIV genome can be used as homology region for any desired virus variant in E. coli without the need of multiple cloning steps. Either cells prior to transplanta-

lentiviral vectors encoding maC46 or a control peptide and were transplanted into NOD/SCID/gamma chain knockout mice. Either race: 70 black, 16 white, 6 other. Origin: South Africa (38), Brazil (28), Malawi (21), other (5).

**HIV - hepatitis virus interactions**

**MOPE0064**

Some antiretroviral drugs increased the degree of steatosis in hepatitis B virus infected hepatocytes

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**Background:** Patients with HIV are sometimes co-infected with hepatitis B virus (HBV). Both antiretroviral drugs (ARVs) and HBV are involved in hepatic steatosis. The aim of this study was to investigate the interactions between ARVs and HBV-induced steatosis.

**Methods:** The lipid content was examined by oil red staining, and the expres-
sion of mRNA associated with the hepatic lipid metabolism, using quantitative real-time RT-PCR in several ARVs-treated human hepatic HuH7 cells with and without HBV. HBV mRNA and HBV-DNA in several ARVs-treated HuH7 cells with HBV infection was examined, using either quantitative real-time RT-PCR or quantitative real-time FACS.

**Results:** HBV increased the lipid content and the mRNA expression associ-
ed with the synthesis of fatty acids (Liver X receptor; LXRα, sterol regula-
tory element binding protein-1c; SREBP-1c, fatty acid synthase; FAS), and the induction of triglyceride (peroxisome proliferator-activated receptor, diacylglycerol acyltransferase; DGAT) in hepatocytes. Some protease inhibi-
tors (PIs) also increased the lipid metabolism, which was more evident in HBV-infected HuH7 cells than in HBV-negative HuH7 cells. Some PIs increased HBV-DNA and the mRNA of hepatitis B virus X protein (HBx), and core regions of HBV, both of which were positively correlated with lipid content and mRNA of SREBP-1c. Atazanavir and raltegravir had little effect on both HBV and lipid metabolism of HuH7 cells with and without HBV. 

**Conclusions:** HBV has been implicated in the abnormal lipid metabolism observed in HBV-associated hepatic steatosis. The current results indicate that the PIs enhanced HBV-induced hepatic steatosis by up-regulating the expression of HBV mRNA as well as by increasing the expression of mRNA involved in the hepatic lipid metabolism, such as LXRα and SREBP-1c. These data could therefore help to determine the optimal ARV regimen for the treat-
ment of individuals with HBV infection and the risk of decompensation. 

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**MOPE0065**

Therapeutic efavirenz (EFV) troughs attained in majority of HIV-infected individuals receiving ritampin (RIF) containing tuberculosis therapy: preliminary data from AIDS Clinical Trials Group Study A5221, a multinational trial comparing early ART within 2 weeks of starting TB therapy (E-ART) vs. ART within 8-12 weeks in HIV-infected subjects with CD4+ counts of < 250 cells/mm³

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Adult AIDS Clinical Trials Group A5221

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**Background:** Limited data exist on the effect of RIF on EFV levels in re-

source-limited settings. Pre-specified analyses estimated EFV troughs in A5221. Subjects received RIF-based therapy with daily EFV (600 mg), emtricitabine and tenofovir.

**Methods:** EFV Cmin was measured 28-28 hours after last EFV dose at weeks 4 and 8 after start of E-ART in subjects with no missed EFV/RIF doses for 3 days, using HPLC (LQ=100ng/ml; < 1000ng/ml pre-specified as subtherapeutic). Exact confidence intervals(CI), Spearman correlation coefficients(SCC), lo-

gistic regression models(LR), and Fisher's exact tests(FE) evaluated at 10% 2-sided Type I error.

**Results:** 92 subjects had both weeks 4 and 8 EFV Cmin available. Self-reported race: 70 black, 16 white, 6 other. Origin: South Africa (38), Brazil (28), Malawi (21), other (5).

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**MOPE0066**

The induction of TNFα via TLR2 can explain some cases of immune restoration disease (IRD) associated with tuberculosis

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**Background:** Most patients with tuberculosis-associated immune restoration disease (IRD) display elevated INFγ responses against mycobacterial anti-
gens. Recognition of mycobacterium associated molecular patterns through Toll-like receptors (TLR) on dendritic cells (DC) and monocyte results in pro-

inflammatory cytokine production (e.g. TNFα and IL-10). Antigen-specific


XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria

Monday 19 July
Poster Exhibition

Tuesday 20 July
Author Index

67
CD4+ T-cells are then activated during antigen presentation by DC and/or monocyte, promoting effective adaptive immune responses. Here, we investigated the role of TLR in TB IRD.

Methods: PBMC were collected at baseline, 6, 12, 24 and 48 weeks from Chinese male patients in Kuala Lumpur, Malaysia (n=14) who initiated ART with < 200 CD4+ T-cells/ml. Six experienced TB IRD, 15 Chinese male healthy controls were included. PBMC producing IFNγ were quantified by ELISPOT after stimulation with PPD (10 μg/ml) and TLR agonists by flow cytometry. PBMC were cultured overnight with mycobacterium-derived lipo-modified (LPS- 

Results: At week 24, TLR2 expression on monocytes and TNFα production on IRD patients were higher than non-IRD patients (p=0.005 and 0.05 respectively). Longitudinal plots showed a dramatic increase in TNFα in 3 TB IRD patients with high TLR2 expression on mDC and monocytes. TNFα production correlated with TLR2 expression (r=0.667, p=0.01) at week 24. Levels of IL-10 were inversely related to TNFα, peaking in the patient with lowest T-cell activation.

Conclusions: High TLR2 expression and TNFα production in response to mycobacterium-derived TLRs ligands suggests a mechanism for the induction of IRD. Future studies should address cytokine responses mediated via TLR.

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MOPE0067

Evaluation of 38kDa and ESAT antibodies for TB diagnosis in human immunodeficiency virus-co-infected individuals in Hyderabad, India

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Background: Tuberculosis is an AIDS-defining illness in HIV-positive individuals and coinfected patients. Antigenic and serological investigations are often not enough to make a diagnosis of TB in HIV coinfected patients. Various serodiagnostic tests based on different M.tuberculosis antigens have been evaluated for the diagnosis of TB. Our earlier work demonstrated that if three serological tests conducted on the same sample increase the diagnostic sensitivity. The present study aims to evaluate the value of detecting antibodies against a combination of 38kDa & ESAT in HIV-TB co-infection.

Methods: The basis for diagnosis of TB was sputum microscopy, chest X-ray and clinical response to treatment. Subjects included healthy controls (n=30), HIV-positive individuals (n=30), Pulmonary TB (PTB) (n=62) and HIV Extra Pulmonary TB (EPTB) (n=62). ELISAs were performed using Pathogenic Myco” kit for detection of IgG, IgM, IgA of recombinant 38kDa derived from M.tb and antibodies to ESAT5 from TBVTRM, CSO, UNA. Statistical analysis was carried out using SPSS version 16.0.

Results: The results showed that 38kDa IgM was significantly elevated in HIV, HIV-PTB and HIV-PTB; IgA was significantly elevated in HIV-PTB and HIV-PTB; IgE was significantly elevated in HIV, HIV-PTB and HIV-PTB and antibodies to ESAT were significantly elevated in HIV, HIV-PTB and HIV-PTB. Results indicate IgG and ESAT might be good indicators of early infection, and IgA, IgG could help to distinguish PTB to EPTB in HIV coinfection.

Conclusions: Use of serological tests for identifying TB in HIV coinfected patients is a cost effective option in developing countries. The fact that antibodies to 38kDa IgG and IgA were elevated in HIV samples as compared to controls indicate that the immunocompromised state increases the risk of activating latent TB infection or contracting new infections and serological tests could be a useful diagnostic tool.

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MOPE0068

Mycobacterium tuberculosis species ELISPOT-based gamma-IFN responses in HIV/ TB individuals submitted to antituberculosis and HAART regimens including efavirenz

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Background: The introduction of HAART reduced mortality and morbidity among HIV patients as well the incidence of new HIV/tuberculosis (TB) co-infections. The reconstitution of the cellular immune response of HIV/TB infected individuals with different patterns of CD4 counts at study entry, measured by intracellular Mycobacterium tuberculosis specific ELISPOT assay along the 6 months of TB/HIV treatment.

Methods: Eighteen HIV/TB individuals treated with rifampicin and HAART regimen were recruited at the Evandro Chagas Clinical Research Institute (FIOCRUZ/RJ). Patients were divided in two groups according to the T cell subsets at baseline: CD4 > 200 cells/mm³ and < 200 cells/mm³. Based gamma-IFN (g-IFN) ELISPOT production to PPD, ESAT-6 and 38kDa/CFP antigens were evaluated at different timeline (baseline, D30, D60, D90, D120 and D180).

Results: The proportion of responders for CD4 > 200 group to PPD antigen increased from 66% (O1) to 92% at D90 and remained stable until D180. The proportion of responders for CD4>200 group reach a peak (77%) at D90 and then declined to 55% at D180 during the TB/HIV associated treatment. Very poor responses to ESAT antigen were observed in both groups; however, for the ESAT antigen, responses were observed for the 38kDa/CFP-10 antigen for both groups but, interestingly, a higher proportion of patients were responders observed to CD4 > 200 one. The magnitudes of the positive responses to tested antigens ranged from 55 to 4230 spots/10⁶ cells in the g-ELISPOT based assay.

Conclusions: An appropriate reconstitution of CD4 and CD8 T-cells was observed to the CD4>200 group, according to CD4 levels at TB treatment and HAART submission. Presenting author email: flavia.santanna@fioruz.br

MOPE0069

Non-tuberculous mycobacteria in pulmonary infections with unfavourable response to anti-TB treatment

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Background: Acid-fast bacilli (AFB) seen on a smear test may represent Mycobacterium tuberculosis as well as non-tuberculous mycobacteria (NTM).

Methods: Among 250 smear positive sputum specimens, 49 had a confirmed clinical diagnosis of pulmonary tuberculosis and also to avoid possible bias, the study was to determine the frequencies of NTM in treatment failure cases of pulmonary infections with AFB-positive sputum.

Results: The patients were HIV-positive, with 6 NTM co-infections versus 3 NTM cases only in HIV-negative patients: however, this difference was not statistically significant (p=0.093). None significant association was found with the patient age and gender (P>0.05).

Conclusions: These results showed the NTM involvement in 8.6% of treatment failures in Burkina Faso. HIV-positive patients appear more susceptible to NTM. The National Program might take them in account in the fight against lung diseases.

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MOPE0070

Biomimetic compounds for the treatment of MDR-TB and XDR-TB

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Background: TB co-infection is a leading cause of death of HIV/AIDS patients in resource poor settings. Antibiotics offering more manageable, effective therapies less vulnerable to drug-resistant strains due to well-defined mechanisms of antibiotic activity are in development. This includes a series of biomimetic compounds showing significant activity against M. tuberculosis.

Methods: M. tuberculosis (H37Rv strain, ATCC 27294) was screened using the Microplate Alamar Blue Assay (MABA) in BACTEC 12B medium by the Tuberculosis Antimicrobial Acquisition Facility, NIAID (TAACF). Six molecules spanning several structural series were tested assays to measure susceptibility against H37Rv strain in 10 two-fold dilutions to determine IC50 values. Viability in monkey Vero cell assay was measured after a 72-hour exposure using a luminescent cell viability assay that measures ATP levels. Cytotoxicity was determined using a curve-fitting program to calculate EC50 values. The EC50 was divided by the IC50 to derive the SI value.

Results: Three arylamide compounds, PX-10070, -10072 and -30053, met criteria for further testing, exhibiting IC50< 5 μg/ml and >3 to 10 fold selectivity for M. Tuberculosis over Vero cells (EC50>100 μg/ml). PX-10070 showed low hemolytic activity with HClO4 values exceeding 5, aureus MCV values by factors of 1,095 and 2,492. PX-30053 was found to be much less cytotoxic against mouse 3T3 fibroblasts than both PX10070 and PX10072. Membrane permeabilization studies found inner membrane leakage for PX10070 and PX10072 at 2 μM concentrations. Widespread permeabilization and leakage of cellular contents was not observed.

Conclusions: Prioritized clinical trials of PX-10070 are in progress to test new therapeutic options for treating MDR/XDR TB to decrease global HIV morbidity. A series of small, non-peptidic antimicrobials with good in-vivo activity, Chris proteins enhance high antimicrobial activity against and selectivity for the H37Rv strain of M. Tuberculosis. An emerging structure-activity relationship suggests promising medicinal chemistry approaches to optimize activity and selectivity against M. tuberculosis.

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MOPE0071  Cellular immune response in HIV-Leprosy co-infection during immune reconstitution syndrome (IRIS)
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Background: Previous results demonstrated that co-infected HIV/leprosy patients on HAART have a higher risk of developing reversion reaction (RR) than non-co-infected leprosy patients. HAART treatment can lead to atypical inflammatory diseases (IRIS). This syndrome has been observed in leprosy/HIV co-infection and clinical symptoms are similar to RR although IRIS treatment occurs with a delay in lesions regression. The aim of this study is to evaluate immunological and histopathological profile of co-infected individuals with RR and IRIS in order to understand the differences and mechanisms that lead to these episodes.

Methods: Leprosy co-infected patients were recruited in Souza Araujo Outpatient Unit at FIOCRUZ. Cytokines in serum were evaluated by ELISA and lymphocyte phenotype by cytometry. Skin biopsies were obtained for immunohistochimistry and RT-PCR.

Results: We observed that RR episodes have local intense inflammatory infiltrate while IRIS patients present an inflammatory infiltrate with some necrosis areas. RNAm expression in skin biopsies of RR patients showed a reduction in pro and anti-inflammatory cytokines expression compared with IRIS. In sera we observed an increase in the production of pro-inflammatory cytokines in IRIS patients with an exacerbation of INF gamma when compared to RR patients. Cytometric analysis showed that RR and IRIS patients had an increase in CD4+CD69+ and CD8+CD38+ in contrast with RR non-co-infected individuals that had an increase in CD4+CD69+ and CD8+CD38+. Besides, individuals with IRIS presented higher increase in CD6+CD45RO+ cells than RR co-infected.

Conclusions: These results suggest that in spite of similarity in clinical profile and response to treatment the cellular immune response is apparently systemic in patients with IRIS in contrast with RR. This is probably caused by the activation and reconstitution of immune system by HAART with an increase of memory T cells and should be considered in the treatment choice.

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MOPE0073  Brucellosis serology in HIV infected patients
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Background: An accelerated evolution of HIV to AIDS has been reported with brucellosis co-infection. The seroprevalence of Brucellosis co-infection with HIV is not investigated in a brucellosis endemic country like Iran.

Methods: We performed a cross sectional survey of brucellosis serology in HIV infected patients attending a university hospital as well as in controls. A total of 90 HIV-positive patients attending a university hospital were recruited as well as 100 healthy age matched controls. The clinical characteristics, hemoglobin, white blood cell, red blood cell, platelet and T CD4 positive cell count were also evaluated.

Results: There were 68 males in HIV infected patients (75% males) and 55 males in the controls (76.5% males). Positive brucellosis serology in HIV infected patients was significantly higher than that in controls (p<0.001). It was also higher in males than females (p<0.001). We also found a 8.78 difference between mean Red Blood Cell count in HIV infected patients and controls (p<0.001). Red blood cell count was also significantly lower in brucellosis infected patients than brucellosis uninfected ones (f=8.78, p=0.003).

Conclusions: Our findings showed that brucellosis infection is an important infection in HIV infected patients with a higher incidence than normal subjects. The brucellosis treatment may be of great clinical importance in the management of HIV infection in Iran.

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MOPE0074  Prevalence of human papillomavirus in women infected with HIV at Ouagadougou, Burkina Faso
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Background: The human papillomaviruses (HPV) are viruses with double-stranded DNA. They are responsible for 95% of cancers of the cervix. About 15 to 20 confer a high risk of progression of lesions to invasive cancer. Objective was to evaluate the prevalence of HPV genotypes among HIV-infected women in Ouagadougou.

Methods: 207 HIV-positive women were included in this study. The sampling is done at the endocervix with a swab tipped cotton. Detection and HPV genotyping were performed using the kit STAR HPV Blot. This kit allows the detection and typing the following HPV genotypes: HPV16, 18, 45, 11, 6. It does not differentiate between these genotypes 31, 33, 35 and 39 (HPV30’s), genotypes 51, 52, 53, 56, 58 and 59 (HPV50’s) genotypes 6, 11, 68, 73, 82 (HR) and genotypes 40, 42, 43, 44.

Results of the 207 HIV-positive women included in this study, 60.4% (125/207) were infected by HPV and 39.6% (82/207) were not infected. Among women infected with HPV genotypes with high and low risk are respectably 97.6% and 2.4% of genotypes detected. Of the HPV genotypes detected, the prevalence was as follows: HPV16: 39.2% (49/125), HPV30’s: 29.63% (37/125), HPV50’s: 36.8% (45/125), HPV51: 5.6% (7/125). HP45: 4% (5/125) HPV1: 1.6% (2 / 125) and HPV6: 6.4% (8 / 125). It should be noted that among the cases of HPV we have found double or triple infections (2 or 3 types of HPV in the same person). These multiple infections represent 40.8% of HPV infections.

Conclusions: This preliminary research work, which shows results that impact public health, could be a springboard for a campaign of testing and epidemiological surveillance of different types of HPV strains circulating in Burkina Faso.

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MOPE0075  Desialylation of HIV-1 gp120 by human influenza (Flu) virus - an experimental model showing another mechanism for HIV-1 to escape from immune control
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Background: Sialoglycoproteins (SGP) of HIV-1 participate in gp120 binding to cell receptors. Desialylation of gp120 induced by neuraminidase (NA) of Flu virus activates HIV-1 replication and infectivity. A hypothesis was out- lined that exogenous neuraminidase (Flu virus) through desialylation of HIV-1gp120 changes its configuration, so becoming unrecognizable by epitope-specific antibodies. Current work aimed to create an appropriate model of in vitro co-infection of HIV-1 + Flu virus to compare sialylation patterns of HIV-1 chronically infected cells - uninfected or co-infected with Flu B virus. Further aim was to try to localize the conformational gp120 changes using epitope-specific monoclonal (MA) to gp120 as well as to V3 of gp120.

Methods: HIV/HTLVIIIIB cells were infected with Flu/B/Harbin, after UV inactiv- ity of hemagglutinin. Twenty four hours later that cells were labeled with [14C]-AcetylManneosaminose - a precursor of sialic acid biosynthesis. Cytosols of Flu-uninfected and infected HIV/HTLVIIIIB cells were then subjected to pre-
parative isoelectric focusing, the supernatants were checked for gp120 and infectivity. Fractions were measured for 1C-incorporation, protein content and reverse transcriptase activity. MA against HIV-1 gp120 (broadly reactive) and gp120 V3 (307-320 aa) (Advanced Bioscience, USA) were used in neutralization assays to study changes in gp120 after Flu treatment.

**Results:** Co-infection with FluB was confirmed by Real-time PCR. Well expressed desialylation of gp120 after FluB treatment was seen. MA against principal neutralization determinant on V3 but not against gp120 (broadly reactive) neutralized FluB-treated gp120 in a concentration-dependent way. Co-infection with FluB was confirmed by Real-time PCR. The desialylated gp120 became recognizable by epitope specific neutralizing antibodies. According to glycan shield model the receptor binding should not be impaired, so explaining HIV activated replication and infectivity also observed in this study.

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**MOPE0076**

Analysis of HIV-1-specific CTL cross-reacting with Influenza A virus in a cohort of HIV-1-infected patients

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**Background:** Recently, it has been shown that HLA-A2 restricted HIV-1-specific CTL, recognizing the p17-epitope SL9 (SLNVTALT), can cross-react with the influenza matrix epitope IM (GILGFVFTL; Acerno et al., J translational Med, 2003) that is a dominant influenza epitope in HLA-A2 positive patients. So far, the prevalence of IM cross-reactive HIV-1-specific CTL in larger HIV-1 infected patient cohorts is unknown and there are no data yet, whether SL9/IM cross-reactive CTL influences the course of HIV-1 infection.

**Methods:** We stimulated PBMC from 14 HIV-1 infected patients (102 on antiretroviral therapy, 6 without therapy) in vitro with the HIV-1 p17 peptide SL9 and the influenza matrix peptide protein IM. Outgrowing cell lines were analyzed regarding cross-reactivity between SL9 and IM, peptide avidities and recognition of viral variants in gamma-IFN-ELispot assays.

**Results:** We could detect SL9-specific CTL in 58 patients and IM-specific CTL in 65 patients. Outgrowing SL9-specific CTL lines cross-reacted to SL9 in 34 patients and outgrowing IM-specific CTL lines to SL9 in 29 patients. Patients with cross-recognition of IM peptide and SL9 had a tendency of lower viral loads prior to and starting antiretroviral therapy, but the difference was not significant (p=0,15). Cross-reaction: median: 57670 range: 270 to 600 000; no cross-reaction: median: 150045, range: 600 to 610 000).

**Conclusion:** A significant proportion of HLA-A2 positive patients have HIV-1 p17-specific CTL cross-reacting with a dominant IM epitope. Since we did not detect a significant influence of the presence of SL9/IM cross-reacting CTL on the course of HIV-1 infection, Further studies are necessary to assess whether SL9/IM cross-reactive CTL may lower the risk of transmission in HIV-1 exposed uninfected subjects and whether they may reduce the risk of developing symptomatic influenza A infection in HIV-1 infected patients.

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**MOPE0079**

Pre-treatment expression of Ki-67 proliferation marker predicts HIV-1 suppression after antiretroviral therapy

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**Background:** Ki-67 is up-regulated during acute active cell cycle phases when intensive virus replication occurs, and elevated cell proliferation measured by Ki-67 is a pathognomonic sign of HIV-1 infection. Whether Ki-67 is a marker for Ki-67+ and/or other immune-activation markers could predict the outcome of antiretroviral therapy.

**Methods:** Blood samples from 32 subjects receiving VfS411, a novel combination of an antiviral (low-dose, slow-release 2’,3’-dideoxyinosine) and an anti-proliferative drug (low-dose hydroxytocarsamide), were analyzed in a 4-week Phase IIa, dose-finding study using 10-color flow cytometry including activa-

tion and proliferation markers. Samples from 7 subjects from another study (RIGHT702) treated with a regimen containing the same drugs independently administered for 12 and 24 weeks were also tested. Two-tailed paired t test and Pearson correlation analyses were employed.

**Results:** In the VS411 study, Ki-67 expression in CD3+ cells was reduced between pre- and post-therapy from 3.1±1.6 to 2.18±0.9% (P=0.012). CD8+ T cells from 11, 32±4.0, 11% to 58, 48±4.8, 11% and 37, 54±10, 011% to 22.2±7.55%, respectively, with P values < 0.005. Similar results were obtained by analyzing CD4+ and CD8+ subsets. A negative correlation between pre-treatment expression levels of Ki-67 in CD3+, CD4+ or CD8+ subsets and post-therapy viral load reduction was found with r=-0.272 (P=0.004) for CD3+, r=0.19 (P=0.018) for CD4+ and r=0.21 (P=0.013) for CD8+ subsets, respectively. In the RIGHT702 study, the correlation between Ki-67 expression and HIV viral load changes was confirmed at week 12 and week 24 with r=-0.852 (P=0.003) and 0.945 (P=0.001), respectively.

**Conclusion:** The percentage expression of Ki-67+ T cells before treatment correlated with HIV viral load reduction after short- and long-term anti-HIV therapy, while the expression of other routine markers did not. Ki-67 appears to be a valuable tool to predict the efficacy of anti-HIV therapy.
MOPE0080
CD38 activation assay as a cost-effective alternative to viral load testing for longitudinal monitoring of HIV patient on antiretroviral therapy (ART)

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Background: Viral Load assays (VL), used for longitudinal monitoring of patients on ART, are costly and labour-intensive. Lymphocyte activation, measured by CD38 expression on CD8+ T-cells, has been reported as a reliable marker of declining viremia in response to ART. Longitudinal monitoring of CD38 activation was investigated as a cost effective, real-time alternative to VL testing.

Methods: Data from 73 HIV+ adult patients (CIPRA cohort; Johannesburg, South Africa 2005–2008; Ethical clearance) monitored longitudinally for 3 years at 12 week intervals were analysed retrospectively. At each visit, CD38+ mean-fluorescence-intensity (MFI) was measured on activated CD8+ T-cells using a 4-colour flow cytometry protocol piggy-backed onto routine Pan-LeucoGated (PLG) CD45/CD42 testing. Commercial controls (Immunotools®, Beckman Coulter) and HIV- samples were tested regularly to ensure assay performance. Further, CD38 MFI baseline was compared to follow-up visit CD38-MFI (as %change) and VL plasma-RNA (COBAS Amplicor, Roche Diagnostics). GraphPad Prism software was used for statistical analysis (%Change and Mean CD38-MFI; One-way ANOVA).

Results: The decrease in CD38 expression from BL values (true negatives) was noted in 60% of patients (44/73). CD38-MFI declined to 42±15% of BL at week 36 and to 30±8% at 12 week (p<0.05). Twenty percent (29/73) of patients had transiently elevated CD38-MFI of which 10/29 coincided with increased VL, while no changes in VL (remained undetectable) were noted in 19/29 patients. No false negatives i.e. VL increase without a concomitant rise in CD38-MFI were reported.

Conclusion: Continuously decreasing/stable CD38 activation relative to BL identified good ART responders with undetectable VL, in 60% of patients. CD38-MFI monitoring could potentially reduce protocol-driven frequency of VL testing and reserve it for patients with elevated CD38-MFI. This strategy offers a cost-effective, reliable, real-time alternative to VL monitoring for a national ART program.

MOPE0081
Evaluation of an economic solid matrix dry plasma transport device (SampleTanker®) for qualitative and quantitative HIV-1 serology using patient plasma posted between different clinical sites

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Background: SampleTanker® (ST) is an economic plasma transport device for HIV-1 molecular virology assays. This study evaluates the use of ST versus frozen plasma as a transportation method for posting dry clinical specimens for qualitative and quantitative HIV-1 serology to support clinical care at distant sites.

Method: EDTA plasma samples were collected, loaded and dried on ST, and posted to the laboratory, paired plasma were frozen (−70°C). HIV-1 antibodies were measured qualitatively and quantitatively (10-fold dilutions) using paired plasma and ST eluates with a POC HIV-1/2 assay (HIV-1/2 DETERMINE). Further detailed quantitative evaluation (2-fold dilutions) was performed using a passive particle agglutination assay (PAA; Serodia HIV 1/2: FUJIREBI INC) in v-bottom microplate format.

Results: Fifty one paired clinical samples were analysed and all showed positive reactive in the qualitative versions of the two assays. Twenty paired samples were analysed in the quantitative paa assay. Sample endpoints by 2-fold dilution ranged from 1 in 20K to 1 in 2.6KX. Eleven paired samples (35%) showed identical endpoints and 9 pairs (45%) had a dilutional differences of one only well (2-fold difference) in favour of the plasma.

Conclusion: This study demonstrated 100% detection and equivalence for qualitative HIV-1 antibody testing using ST eluates compared with frozen plasma. Further, quantitative measures using dry specimens showed no differences in plasma versus ST eluate and serial 2-fold dilutions revealed equivalence in 97% of cases. While no 2-fold dilutional difference in the remainder.

ST provides a highly flexible and cost-effective means of transporting samples from distant and resource-limited settings. It has been used for VL, resistance and other molecular assays and here for accurate determination of HIV-1 antibodies that will enhance the real-time clinical care of adults and children.

MOPE0082
mRNA electroporation of PBMC is a rapid and efficient method for immunomonitoring of T-cell responses against autologous HIV-1 strains

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Background: Monitoring of HIV-1-specific T-cell responses is essential for the understanding of the pathogenesis of HIV-1 infection and for the development of vaccines. Currently, mainly peptides and vaccinia vectors are used for the detection of HIV-1-specific T-cells, however, as HIV-1 is a variable virus, it is not known to what extent the T-cell response against the autologous virus is underestimated by using antigens from heterologous viral strains. Therefore, we developed a new method testing for the immunomonitoring of CTL by electroporation of PBMC with mRNA derived from autologous viral strains.

Methods: Viral RNA was isolated from plasma of five HIV-1 infected patients and various viral genes (gag 3x, nef 2x, env 1x) were cloned and viral mRNA was electroporated into PBMC. Protein expression of mRNA was determined by FACS staining, CTL response induced by the electroporated PBMC was measured by IFN-γ Elispot.

Results: Electroporation of mRNA into PBMC induced rapid protein expression. Elispot analysis showed that PBMC electroporated with HIV genes induced a good IFN-γ release, comparatively to peptide pools and much better than a gag expressing vaccinia virus. Comparison between autologous mRNA and standard HIV-1 strain (SF2, HXB2) showed that 3/5 patients had a stronger CTL response against autologous mRNA than against the heterologous viral mRNA. IFN-γ secreting HIV-1 specific CTL could be detected at RNA-concentration down to 1μg and expression of the mRNA could be detected up to 6 days after transfection.

Conclusion: We could show that electroporation of PBMC with mRNA is a very efficient, easy and rapid method and it represents a new tool for immuno-monitoring of HIV-1 specific T-cell responses superior to the use of recombinant vaccinia viruses. Furthermore, our data demonstrate that patients’ CTL responses against autologous viral strains may be underestimated by using antigens from heterologous viral strains.

MOPE0083
Development and application of a new assay system (CLEIA) for HIV antigen and antibody

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Background: HISCL 2000 is a new automated chemiluminescent microparticle immunoassay analyzer, the time to obtain one result is approximates 17min and sample volume is 10-30 microliters. We are developing HISCL HIV Ag+Ab assay kit for the detection of HIV p24 antigen and antibodies to HIV-1 (group M and O) and HIV-2 in human serum and plasma. We installed HISCL 2000 at ITM Prince Leopold Institute of Tropical Medicine, Belgium, and evaluated the kit using various HIV infection specimens.

Methods: Following specimens were evaluated by the HISCL HIV Ag+Ab assay: very effi  cient method for immunomonitoring of T-cell responses superior to the use of recom-binant vaccinia viruses. Furthermore, our data demonstrate that patients’ CTL responses against autologous viral strains may be underestimated by using antigens from heterologous viral strains.

Results: Fifty one paired clinical samples were analysed and all showed posi-
tive reactive in the qualitative versions of the two assays. Twenty paired samples were analysed in the quantitative paa assay. Sample endpoints by 2-fold dilution ranged from 1 in 20K to 1 in 2.6KX. Eleven paired samples (35%) showed identical endpoints and 9 pairs (45%) had a dilutional differences of one only well (2-fold difference) in favour of the plasma.

Conclusion: This study demonstrated 100% detection and equivalence for qualitative HIV-1 antibody testing using ST eluates compared with frozen plasma. Further, quantitative measures using dry specimens showed no differences in plasma versus ST eluate and serial 2-fold dilutions revealed equivalence in 97% of cases. While no 2-fold dilutional difference in the remainder.

ST provides a highly flexible and cost-effective means of transporting samples from distant and resource-limited settings. It has been used for VL, resistance and other molecular assays and here for accurate determination of HIV-1 antibodies that will enhance the real-time clinical care of adults and children.

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Novel assays for viral monitoring

MOPEO084 - Evaluation of absolute lymphocyte count as a surrogate marker for CD4+ cell count for the initiation of antiretroviral therapy (ART) in resource-limited settings

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Background: In resource-limited settings, laboratory assessment of HIV-in- fected individuals requires the consideration of simple markers for the initiation of monitoring of HAART. Absolute lymphocyte count (ALC) was considered simple and cost-effective tool to determine when to initiate ART in resource-limited settings.

Methods: Blood samples from 273 asymptomatic HIV-positive, ART-naïve in- dividuals aged 18 to 57 years (33.3% males, 66.7% females) who presented for assessment for ART-eligibility were analyzed for CD4 count by flow-cytom- etry and ALC by automated haematology cell counter. Spearman rank correla- tion between CD4 count and ALC was assessed and positive predictive value (PPV), negative predictive value (NPV) and specificity of ALC cut-offs were computed for CD4 counts < 200 cells/µL and CD4 counts < 350 cells/µL.

Results: High degree of correlation was noted between CD4 and ALC counts (r=0.89, P<0.001). ALC, PPV, NPV and specificity of ALC cut-offs were computed for CD4 counts < 200 cells/µL and CD4 counts < 350 cells/µL. ALC < 1400 cells/µL had a 96% PPV, 87% NPV, 89% sensitivity and 96% specificity for CD4 counts < 200 cells/µL. ALC < 2300 cells/µL had 89% PPV, 51% NPV, 83% sensitivity and 62% speci- ficity for CD4 counts < 350 cells/µL.

Conclusions: The results of this study demonstrated the capability of absolute lymphocyte count to serve as a surrogate marker for CD4+ cell count for the initiation of antiretroviral therapy (ART) in resource-limited settings. Given the greater availability and lower cost of ALC, there is a clear argument to proceed with HIV disease treatment and opportunistic infection prophylaxis based on ALC results. This would no doubt overcome one of the practical obstacles to more widespread provision of antiretroviral therapy in resource- poor settings.

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MOPEO085 - Ultra-high-throughput HIV-1 viral load testing on the Gen-Probe TIGRIS DTS analyzer

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Background: Increased access to ART creates an urgent need for higher throughput HIV-1 viral load (VL) testing. The APTIMA TIGRIS HIV-1 VL assay is a transcription-mediated amplification (TMA) assay with chemiluminescent detection, targeting the Pol/IN region. The assay is quantitative across a lin- ear range of 400-100 000 copies/ml and is designed for the fully automated TIGRIS platform (currently implemented in the South African blood banking services nationwide for donation screening). Assay throughput is 1000 tests in 14 hours, with 35 calibrators/controls per run, using a single operator. This assay was compared to the Abbott RealTime HIV-1 assay on HIV-1 subtype C specimens from South Africa.

Methods: Ultra-high throughputs of 1000 tests were selected and the following were investigated: precision using clinical samples, calibrators and controls to monitor intra and inter-variability over 5 and 10 runs, respec- tively; (yielding 900 results), linearity of 26 clinical samples diluted across log2.0-log5.0, accuracy on 169 clinical samples (bias) was determined using the Bland-Altman and percentage similarity analysis.

Results: Controls and calibrators (n=300 results) and clinical samples (n=600 results) showed acceptable intra/inter-variability < 35%CV on the absolute values and a standard deviation < log0.15copies/ml. A representative linear regression equation: y=1.02x+0.499 95% of the clinical samples generated a higher value on the APTIMA HIV-1 assay which resulted in a consistent bias of log0.49copies/ml (standard deviation= log0.331copies/ml) compared to the Abbott RealTime assay (ALT). There was excellent percentage similarity agreement with the Abbott RealTime HIV-1 is CV5.78% resulting in 5% clinically relevant (≥ 20.0 logcopies/ml) outliers.

Conclusions: This assay shows good reproducibility and linearity in a range that is translatable for clinical patient management for ART initiation and vi- ral load detection. The increased bias against existing technology re- quires adjustment and further clinical investigation. This assay is designed for the South African platform and addresses the shortage of skilled laboratory personnel in countries with high HIV-1 prevalence.

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MOPEO086 - Sample stability using the version 3 Cavi diExaVir™ load quantitative HIV RT viral load monitoring assay

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Background: Within resource-limited settings (RLS) it is often difficult to get blood samples to laboratories within time frames specified by the manufacturer. We assessed the stability of samples using the Cavi diExaVir™ Load assay version 3 (HIV RT) under a variety of conditions that would mimic collection and storage problems in RLS.

Methods: 1. To assess the effect of anticoagulant and delay of separation, whole blood was collected from HIV-infected individuals in EDTA and ACD anticoagulant. Plasma was separated at 6, 24, 72 hours and 1 week post-collection and stored at -70ºC (n=10). 2. To evaluate storage conditions whole blood was collected in EDTA and stored at -70ºC and -20ºC for 5 months, 4ºC for 1 month and room temperature for 1 week (n=10). 3. The effect of freeze-thawing was measured by collecting whole blood in EDTA and subjecting samples to 1, 10 or 30 freeze thaw cycles (n=10).

Results: 1. Neither delays in processing of ≤1 week nor type of anticoagulant used affected the HIV RT result with the mean of all time points differing from the baseline result by < 0.3log10.

2. The storage temperature or length of storage ≤6 months did not affect the HIV RT result. All storage conditions were compared to the sample stored at -70ºC for 1 week and most differed by ≤0.5log10.

3. There was minimal difference in the HIV RT result between 1 and 10 freeze- thaw cycles with a mean decay of 0.15 log10; the decrease was larger for 10 cycles (0.38 log10).

All samples tested were compared to HIV RNA.

Conclusions: We have shown that samples received and stored outside of the manufacturer’s recommendations did not affect the result using the HIV RT assay. This assay is ideal to use in laboratories with suboptimal transport and storage conditions as often encountered in RLS.

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MOPEO087 - Evaluation of the ABBOTT m2000rt real-time HIV-1 quantitative assay with DBS samples for the use in resource-limited settings

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Background: Though plasma is the best choice for HIV-1 viral load quan- tification, dried blood spots (DBS) are inexpensive to prepare and easy to transport and potentially represent a good alternative to plasma especially in resource limited settings. This study evaluates the use of DBS for viral load testing by ABBOTT Real-Time PCR comparing it to the standard plasma specimen.

Methods: Sixty paired plasma and DBS specimens were collected using what- man 903 filter paper (50µL/circle) and stored at room temperature (RT). Two spots were excised and lyed with 1.7 mL Abbott mlysis buffer. The liquid was then transferred and the RNA was extracted from plasma and DBS manually as per 1µL protocol recommended in the ABBOTT technical manual. All values were log10 transformed and then were compared using Pearson’s Correlation Coefficient and bland-Altman was done to assess the agreement. All analyses were performed using SPSS Statistical software (version 13.0; SPSS Inc., Chi- cago, IL), a β < 0.05 was considered significant.

Results: VLs ranged from 1.83 to 5.79 log10 copies/mL and the mean (±SD) for plasma and DBS was 4.30±0.884 and 4.17±1.050, found to be a good correlation between DBS and plasma (r=0.9603, p<0.001). Up to 3% of the specimens with measurable viremia in plasma yielded undetectable val- ues with DBS. Positive correlation was also observed at intervals < 2.00 (r=0.831, p < 0.005) and ≥ 2.00 (r=0.8999, p< 0.002) log values. Bland-Altman analysis found 95% of the samples within acceptable limits defined by the standard deviation (-0.4944 to 1.7522 log copies/mL).

Conclusions: Viral loads obtained from plasma and DBS showed good cor- relation and hence HIV-1 viral load quantification in DBS. DBS may be the choice for monitoring of HIV-infected patients in resource-poor settings, where access to adequate laboratory facilities is often difficult.

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MOPEO088 - Development of a highly sensitive and reproducible plasma HIV-2 RNA copy quantification method for monitoring antiretroviral treatment

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Background: HIV-2 is less pathogenic than HIV-1, but 25% of HIV-2-infected cases progress to AIDS. For HIV-2, the antiretroviral treatment (ART) strategy is the same as for HIV-1, except non-nucleoside RT inhibitors are not effec-
In clinical isolate. The measurement values of KK-TaqMan assay of 45 plasma samples from the Los Alamos HIV databases. The standard curve was generated from the most conserved region of HIV-1 group M isolate sequences and the results were well correlated \( r = 0.9524 \) \( (p< 0.05) \). Bland-Altman analysis was also confirmed 95% of the samples within clinically acceptable limits of agreement \( (-0.7017 \text{ to } 1.2065 \text{ log copies/mL}) \). Abbott RealTime PCR was 100% sensitive and 87% specific for detecting the PLV of more than 1000 copies/mL and 100% specificity was also confirmed by testing HIV-12 SN plasma samples.

Conclusions: The new m2000rt PLV assay is throughput, reliable and accurate. The real-time PCR has less chances of amplification contamination and provides increased productivity resulting in consistent and reproducible results of genetically diverse strains of HIV-1.

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MOPE0092 Quantification of HIV-1 RNA in blood samples by a Poisson distribution-based RT-nested PCR method

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Background: HIV-1 RNA levels in plasma are used for monitoring HIV infection and as a diagnostic tool, especially for early infection. There are several commercial assays for HIV-1 RNA quantification. In Japan, the AmpliCor HIV-1 Monitor version 1.5 assay (Monitor) was replaced with the Cobas TaqMan HIV-1 assay (TaqMan) in 2008-2009. During several comparative studies in European countries demonstrated opposite results. To clarify which assay provides more accurate quantification values, we conducted a Poisson distribution-based PCR method (Poisson assay) for HIV-1 RNA quantification in clinical blood samples.

Methods: Viral loads of 24 blood samples (average, 24,000; range, 51,106,000) were measured with Monitor, TaqMan and Poisson assay. Poisson assay was performed as follows. The HIV-1 IES isolate was used as reference standard, and the bovine leukemia virus RNA as internal standard. A 200-µL serum sample was spiked with 10,000 copies of IS and subjected to RNA purification by the QiAmp MinElute Virus Spin kit. The purified RNA was diluted to near the endpoint and assayed in 80 replicates with in-house RT-nested PCR targeting a gag p24 region. Degenerate primers within nucleotides in mutation-prone sites were used.

Results: Mean viral loads obtained with the Monitor, TaqMan and Poisson assay were 4.10, 4.38 and 4.16 log 10 copies/mL, respectively. The viral loads obtained with TaqMan were significantly higher than those obtained with Monitor and Poisson assay \( (p < 0.05) \). There was no significant difference between Monitor and Poisson assay.

Conclusions: Quantifications by an in-house Poisson distribution-based RT-nested PCR assay can be used for evaluation of accuracy of commercially available HIV-1 RNA quantification kits and may be applicable to samples whose matrix was not tested by the manufacturers.

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MOPE0093
Nutritional status and quality of life of women living with HIV/AIDS

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Background: Severe positive women have always been a neglected part of Indian population. They are doubly vulnerable due to the HIV and malnutrition vicious cycle, which may affect their quality of life (QOL).

Methods: 55 HIV positive female patients in the age group of 20-45 years on antiretroviral therapy were recruited from School of Tropical Medicine, Kolkata, for a cross sectional study. Weight, height, waist, grip strength, tricep skin fold (TSF) and mid upper arm circumference (MUAC) were measured by standard methods. Nutrient intake was calculated by 24 hour recall and food frequency questionnaire. WHO QOL-HIV BREF was used to assess QOL. The statistical analyses used were T test and Pearson’s correlation.

Results: Among 55 patients, 32 (58.2%) and 23 (41.8%) were asymptomatic and symptomatic respectively. The mean adequacies of energy and protein for all the subjects were 57.6 ± 21.89 and 61.27 ± 28.50 percent respectively. Among micronutrients the mean intake of β Carotene was the lowest followed by iron, calcium and vitamin C. The Body Mass Index (BMI) of the symptomatics was significantly (p = 0.009) lower than the asymptomatic subjects, the mean being 19.84 ± 3.6 (kg/m²), with 27.3% having BMI < 18.5 (kg/m²). The mean TSF, MUAC, grip strength and hemoglobin level were 10.66 ± 4.4 mm, 23.72 ± 3.43 cm, 16.12 ± 5.03 kg and 10.8 ± 1.3g/dl respectively. The scores of QOL were correlated positively with all the parameters of nutritional status. Grip strength and hemoglobin level were significantly correlated (p < 0.01) with the scores of four and five domains of QOL respectively.

Conclusions: Dietary intake was inadequate, which in turn affected the nutritional status. Conservation of muscle mass and maintenance of hemoglobin levels may improve QOL in HIV infected women. Thus there is a need for nutritional counseling and other nutritional intervention.

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MOPE0094
Relationship between MUAC and CD4 count: results of a study carried out by ACF in the university college Donka hospital in Conakry, Guinea in 2009

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Background: HIV infection is characterised by a long progressive decline in health status, resulting in increased nutrient requirements.

The study was done in 2009 in the University College Donka hospital, one of the referral National Hospital in the country.

Methods: The study was focused on HIV-positive adults (16 - 65 years old) treated at the Infectious Diseases and Dermatology Services of Donka Hospital. Main variables studied were: MUAC (210 mm cut off) and CD4 cell count (350/ul cut off). Data were analyzed using EPINFO and compared with Chi Square Test.

Results: Among 151 individuals, MUAC >210mm were present in 83.4% (126/151) and a MUAC < 210mm were present in 16.6% (25/151). CD4 cell count < 350/mm3 was present in 65.6% (99/151), 77.8% (77/99) in those normal with well nutritional status according MUAC compared with 22.2% (22/99) in those with MUAC < 210mm (p < 0.05). When the cohort was re-ducted to persons under ARV treatment (n=145), CD4 cell count < 350/ul were present in 64.8% (94/145). Low MUAC were present in 18.1% (17/94) with a MUAC < 210mm (p < 0.05).

Was not possible did the analysis in the individuals that were not under ARVs treated.

Conclusions: The study revealed a significant correlation between CD4 cell count less than 350/ul and MUAC < 210 mm), indicator of acute under nutrition. Results suggest the importance of nutrition support into clinical HIV care and treatment. Nutritional support is an important component of comprehensive HIV care aimed at improving the quality of life and survival of people living with HIV.

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MOPE0095
A pilot study to determine feasibility of procurement and distribution of standardized food basket of locally-available foods within HIV treatment in Kenya

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Background: HIV infection causes immunodeficiency and increased resting energy expenditure. Undernutrition also causes secondary immune defects. Some HIV programs offer food-by-prescription for individual patients. Few programs have attempted provision of standardized family supplements for HIV-infected patients to improve individual outcomes by addressing household food sharing and access.

Methods: At a HIV treatment site in Kenya, 96 HIV-infected patients enrolled into a six-month macronutrient supplement program providing 50% of energy needs for a family of five. The primary study outcome was weight-change over six months. Patients were eligible if at least one child was eligible for food.<d ef>20kg/m². The standardized package of locally-available supplement (food-basket) included milled/whole maize, beans, oil and fortified porridge (sorghum, groundnuts/peanuts, millet), and was distributed at monthly ART visits.

Results: We identified local macronutrient suppliers, storage space at clinical facilities, and systems for supplement packaging and distribution. Regular feedback screening was overseen by study staff. Family supplement weights varied, with a median of 56.4 (range 45.5-63.0) kg per 6-month period. Weekly pickup visits ranged from 1 to 4, with 61 of 62 visits completed on the scheduled day (adherence rate=98.4%). Programmatic challenges included staffing, aflatoxin testing, and packaging and distribution. The form of supplement (food-basket) was acceptable to patients.

Conclusions: Procurement and distribution of standardized food-basket designed for a family of five was conducted within HIV treatment. Challenges included aflatoxin testing, storage and packaging, and distribution. Though somewhat expensive, the food-basket uptake was high. Adherence was excellent. Locally-available food-basket supplementation is well-accepted and feasible.

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MOPE0096
Nutrition- and household-related characteristics of adult HIV-infected patients with body mass index below 20 kg/m² who are initiating antiretroviral therapy in Central Province, Kenya

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Background: Malnutrition and HIV coexist in sub-Saharan Africa. While low body-mass index (BMI) may predict mortality, few studies have examined detailed nutrition-related patient-level information in patients who initiate antiretroviral therapy (ART). We measured patient characteristics associated with low BMI in a nutrition supplementation pilot study in order to help design future effective nutrition supplementation programs for undernourished HIV-infected adults.

Methods: At HIV Clinics at two public hospitals in central Kenya, data was collected on clinical history, socioeconomic characteristics, food security (FANTA), laboratory testing and household visits for 174 consecutive eligible HIV-infected adults. Patients had hemoglobin < 11.0mg/dL. Mean household size was 4.9 (+1.8) children under five (p=.927).

Results: Mean travel time to clinic was 87.4 minutes, costing KSh 118.1 USD$16.9. Eleven of 58 households visited (19.0%) were < 50Km away. Mean household size was 4.2 (SD2.0), with 2.4 adults, 1.8 children < 16 years, and 87.9% of participants were moderately/severely food insecure. Number of pickup visits ranged from 1 to 4, with 61 of 62 visits completed on the scheduled day (adherence rate=98.4%). Programmatic challenges included staffing, aflatoxin testing, and packaging and distribution. The form of supplement (food-basket) was acceptable to patients.

Conclusions: Procurement and distribution of standardized food-basket designed for a family of five was conducted within HIV treatment. Challenges included aflatoxin testing, storage and packaging, and distribution. Though somewhat expensive, the food-basket uptake was high. Adherence was excellent. Locally-available food-basket supplementation is well-accepted and feasible.

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MOPE0097 Nutrient composition of breast milk in HIV-seropositive women

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Background: Women in developing countries have the difficult choice of balancing the risk of transmitting HIV through breast milk against the potential benefits. In this study we describe the nutrient composition of breast milk in HIV-infected women in South Africa. The formulae were prepared by a lack of clean water and proper hygiene, the nutritional and immunological benefits of breastfeeding are therefore considered to outweigh the risk of mother-to-child transmission of the HIV. Science has dealt with understanding breast milk as vector of HIV transmission. However, data is not yet known in the extent to which this infection and its metabolic effects on the mother affect the quality of the breast milk. Information such as this could be valuable to better understand the metabolic coping mechanisms of HIV-infected women, and also to identify the extent to which breast milk provides the growing infant with sufficient nutrients.

Objective: To compare the nutrient composition of breast milk in HIV-infected and non-infected mothers that attended Primary Health Care Clinics in the Bloemfontein region of South Africa.

Methods: Breast milk samples from 50 lactating HIV-seropositive and seronegative mothers were collected. Clinical data was obtained from patient files. The haematological parameters, CD4- and viral load counts were analysed in pathology laboratories. The analysis of macro- and micro-nutrients variables was performed according to standard procedures at the Quality Control Laboratory of Dairy Belle.

Results: Large differences were found to exist amongst the content of individual human milk samples. Wide variability was detected in the concentrations of calcium and phosphorus. Calcium tended to have higher variation than phosphorus. In summary our results agree fully with previous reports about the composition of human milk.

Conclusion: This study holds important public health implications, especially in developing countries where mothers are advised to exclusively breastfeed their infants and where infant mortality is high.

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MOPE0098 The prevalence of malnutrition in people living with HIV/AIDS of China

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Background: Malnutrition is a risk factor related to mortality, opportunistic infections and metabolic morbidity on people living with HIV/AIDS (PLWHA). Lacking nutrition awareness and nutritional support services, this vital element has long been ignored in China’s HIV/AIDS treatment and care. The objectives of this project are to evaluate the prevalence of malnutrition among Chinese HIV/AIDS patients and provide evidence for further intervention. This is first cross-sectional study to explore malnutrition prevalence and characteristics in the style of urban PUNWA in China.

Methods: Patients were recruited through the project’s partner networks (from community based, outpatient clinics and inpatient wards of a major transplant hospital in Chengdu). Patients’ nutritional status was evaluated using Subject Global Assessment and BMI, food frequency questionnaire and anthropometric tools. Life qualities were assessed using SF-36 scale.

Results: Ninety-two HIV-positive clients and AIDS patients were enrolled through November 2009. There were 56 patients and 22 HIV-positive, untreated clients. The prevalence of malnutrition was 44.1% and 16.7% untreated HIV-positive clients suffered calorie under intake. Protein intake was insufficient for 29.4% hospitalized AIDS patients and for 33.1% HIV-positive clients.

Conclusions: Malnutrition is becoming a major challenge for Chinese HIV-positive clients, especially for AIDS patient who underwent inpatient treatment. Calorie and protein deficiencies should be given more attention in HIV/AIDS care programs. Nutrition evaluation and support should be considered integral parts of national and community HIV/AIDS treatment and care guidelines.

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MOPE0099 The difference of total lymphocyte count in severe malnutrition - hospitalised children with and without human immunodeficiency virus infection

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Background: Severe malnutrition has been associated with human immunodeficiency virus infection among children. However, there is little information of the added burden of HIV infection in total lymphocyte count (TLC) of severely malnourished children.

Objective: To compare the TLC in severe malnutrition with and without HIV infection among hospitalized children.

Methods: This was a retrospective cross-sectional study of 0-5 year-old severe malnutrition children admitted since 2000 to 2009. The data from medical records were analyzed with respect to the age, sex, anthropometric measurements, HIV status confirmed by serology (ELISA, PCR, and TLC). The TLC was compared between 14 HIV children and 44 non-HIV controls matched by age. Statistical analysis were carried out using chi-square and t-test.

Results: From 58 severe malnourishment children, 14 had HIV infection. The mean of TLC in HIV group was 2744 (1808 to 4489), whereas in non HIV was 6261 (4755 to 7766). The HIV-positive children showed significant (mean difference -3517 [-7500 to 1295], p < 0.05) lower TLC compared to non HIV children, and HIV-positive children, respectively. 23.5% of hospitalized patients and 16.7% untreated HIV-infected and 22 HIV-positive, untreated clients. The prevalence of malnutrition was through April to December of 2009. There were 70 hospitalized AIDS patients and 250 cell/mm3 and viral load cell count < 250 cell/mm3, which qualifies patients for ART in Botswana. CD4+ cell count was determined every 3 months and HIV-positive women every 6 months. Questionnaires, pill-counts, and plasma micronutrients were used to assess adherence with study supplements. Severe malnourishment programs prolong the disease stage, improving patients’ well-being, and may translate into financial savings and broader access to HIV treatment in developing countries.

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MOPE0100 Micronutrient supplementation to prevent disease progression in HIV infected adults in Botswana

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Background: Botswana has one of the highest rates of HIV infection in the world. The objective of this trial was to determine whether supplementation with micronutrients can improve immune function and prolong time to AIDS in HIV-infected adults in Botswana.

Methods: A prospective randomized controlled clinical trial was conducted with 875 HIV+ adults, who were on antiretroviral therapy (ART) and had CD4+ count >350 cell/mm3, were randomly assigned into supplementation and placebo groups for 24 months. Supplementation included B-complex, Vitamin C and E, and Selenium. The micronutrient and placebo supplements had identical appearance. The primary endpoint was a drop of CD4+ cell count < 250 cell/mm3, which qualifies patients for ART in Botswana. CD4+ cell count was determined every 3 months, and HIV-positive women every 6 months. Questionnaires, pill-counts, and plasma micronutrients were used to assess adherence with study supplements. Severe malnourishment programs prolong the disease stage, improving patients’ well-being, and may translate into financial savings and broader access to HIV treatment in developing countries.

Results: Mean age of participants was 34.48±8.1 and 73% were women. Adherence with supplementation was 98%, compliance with study visits was 92%. Viral load, metabolic profiles and intercurrent events indicated the supplements were safe. Supplementation with micronutrients prolonged time to CD4+ cell count < 250 cell/mm3 compared to placebo, (HR=0.71, 95%CI:0.518, 0.979, p=0.0368).

Conclusion: This study demonstrated that long-term micronutrient supplementation was safe and significantly prolonged time to CD4+ count < 250 cell/mm3. This evidence supports the use of micronutrient supplementation as an effective intervention in HIV+ adults in Botswana. Analyses of the effect of supplementation on morbidity and mortality are now in progress. Nutritional supplementation prolongs the disease stage, improving patients’ well-being, and may translate into financial savings and broader access to HIV treatment in developing countries.

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MOPE0101 The effect of zinc supplementation on immune failure in HIV infected adults on stable antiretroviral therapy (ART)

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Background: Adequate zinc status is critical for immune function. The effects of zinc supplementation on the onset of immunologic failure defined as inadequate increase in CD4+ cell count have not been adequately explored. Immunologic failure is associated with increased risk of clinical progression and mortality. Therefore, we investigated the benefits and safety of zinc supplementation in nutritional doses to prevent immunologic failure.

Methods: After informed consent, a cohort of patients on ART with suppressed HIV-viral load were randomly assigned into zinc supplementation (15 mg zinc for men and 12 mg for women), or placebo, and followed for 18 months. Blood was drawn for CD4+ cell count, viral load and metabolic profiles. Questionnaires on treatment history and adherence were completed at baseline and every 6 months. Immunologic failure was defined as a drop of CD4+ cell count < 200 cells/mm3.

Results: Of the 40 participants, 27 (67.5%) were African-American, 36 (90%) were men, and mean age was 45.9±7.1 years. Viral load was continuously suppressed during the follow-up period for all participants. There was no significant difference between the two groups in terms of age, gender, or duration of ART. In the Cox-Regression analysis, 7 participants were excluded at baseline due to immunologic failure (CD4+ cell count < 200 cells/mm3). Four new events of immunologic failure were detected during the 18-month follow-up,
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Background: HIV infection and the long-term use of antiretrovirals are associated with increased mitochondrial damage and oxidative stress. In addition, several clinical trials suggest that antioxidant and mitocnuclear supplementation improves immunologic and virologic clinical outcomes in HIV-infection. The objective of this study was to determine whether antioxidant supplementation has a beneficial effect on immunecomponent, and on reducing mitochondrial damage using OXPHOS Complex I (CI) and Complex IV (CIV) as biochemical surrogate markers of mitochondrial toxicity.

Methods: After consenting, 25 HIV+ adults on stable ART ( viral load < 50 copies/mL) were randomly assigned to antioxidant supplementation (B-complex, Vitamins C and E, Selenium, Zinc, N-acetyl cysteine, and lipoic acid), N=13, or to placebo, N=12, and followed for 8 weeks. At baseline and at 8 weeks, fasting blood was drawn for markers of HIV disease progression (CD4 cell count, viral load), mitochondrial (mitochondrially encoded complex IV activity, mitochondrial damage), HOMA (Homeostasis Model Assessment of insulin resistance, HOMA-IR = Fasting insulin (µU/ml) × Fasting glucose (mM) / 22.5), and anthropometrics were measured. Homa was calculated using the formula HOMA-IR = Fasting insulin (µU/ml) × Fasting glucose (mM) / 22.5.

Results: Mean age was 48.88±5.20 years, 56% were men, and mean CD4 cell count was 506.2±54 155.3 cells/mm³. In a Mixed Models analysis over time, antioxidants were associated with increased CD4% (β=6.61, p=0.06), and CD4/CD8 ratio (p=0.277, p=0.09), and increased Complex IV (p=16.53, p=0.0163), which remained significant after controlling for baseline Complex IV (p=0.046), and reduced HOMA (β=17, p=0.09) after controlling for BMI.

Conclusions: Supplementation with the antioxidant formula improved immune reconstitution, significantly reduced mitochondrial damage and was safe. Longitudinal studies with adequate sample size are needed to evaluate whether antioxidants given as adjuvant therapy with ART improve immune reconstitution and reduce mitochondrial toxicity and oxidative stress in HIV+ patients on ART.

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MOPE0103
Increase burden of nutritional problems in HIV patients initiating ART compared to the general population of Mali
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Background: In sub-Saharan Africa, adult malnutrition has been an enduring and growing preoccupation. Economic and food crises have contributed to the rise of undernutrition in populations already stricken by the HIV epidemic. Few studies from SSA have compared HIV+ and HIV- populations to describe the extra burden of nutritional problems in HIV+ adults; those that did found a greater prevalence of malnutrition in those infected.

Methods: Data was obtained from the ATARAO cohort, a one-year multi-centric prospective study of naïve patients initiating antiretroviral treatment (ART) in two cities of Mali (Bamako, Sikasso). Sociodemographic and health characteristics of the general population was obtained from the 2006 edition of the Demographic Health Survey (DHS). Comparisons between DHS and ATARAO data had to be restricted to non-pregnant women due to DHS data availability.

Results: In Bamako, 31.9% of the ATARAO women (vs 7.8%) had a BMI < 18.5, indicative of malnutrition, and more ATARAO women were anemic compared to the general population (76.6% vs 49%). Examination of sociodemographic characteristics indicated that ATARAO women were significantly older. However, both groups did not differ otherwise. As observed in Bamako, more ATARAO women living in Sikasso had a BMI < 18.5 (27% vs 13%) or suffered from anemia (89% vs 54%). While both groups did not differ in terms of age, we observed that ATARAO women were more seldom married, were more literate, and less precarious living conditions, and had fewer children.

Conclusions: At ART initiation, HIV+ Malian women display markers of malnutrition and adverse conditions beyond those observed in the general population. The extra burden of nutritional problems among ATARAO women did not appear to be associated with more precarious living conditions and could solely be the result of the disease process. This underscores the importance of combining nutritional interventions with treatment initiation.

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MOPE0104
Household food insecurity among HIV-affected households with infant children in Port au Prince, Haiti
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Background: Household food insecurity is strongly associated with an increased risk of malnutrition in children in resource poor settings. Malnutrition is the underlying cause of over half of young child deaths globally. There are little data on food insecurity levels among HIV affected households with infants. We hypothesized that HIV affected households in Port au Prince, Haiti may have high rates of food insecurity and severely food insecure on a weighted scale.

Methods: Food insecurity status was assessed for the households of 75 HIV-infected mother-infant pairs at the GHSKID medical clinic in Port au Prince, Haiti. Assessment utilized the Food and Nutrition Technical Assistance Household Food Insecurity Access Scale, a nine question interview tool measuring three dimensions of food security: quality of food, quantity of food, and uncertainty regarding food access. This tool has been validated in Haiti and other resource poor settings. Households were categorized as mildly, moderately, or severely food insecure on a weighted scale.

Results: 86% of the HIV-affected households were found to be severely food insecure, a higher rate than reported previously in Haiti (57%). 77% of households reported insufficient quantities of food over the past month, 73% reported having no food to eat in the household at times during the past month. 63% of households experienced insufficient quality of food intake. A reduced variety of food intake which can be associated with micronutrient deficiencies was reported by 49% of households.

Conclusions: HIV-affected households with infants are characterized by a high degree of food insecurity, both in terms of insufficient quantity and quality of food intake. Food insecurity may be associated with the high rates of malnutrition and mortality seen in children born to HIV-infected mothers in Haiti and other resource poor settings. Attention to nutritional vulnerability should be an integral part of HIV care for HIV-affected households with young children.

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MOPE0105
Predictors of weight gain in a cohort of HIV-positive injection drug users (IDUs) initiating antiretroviral (ART) therapy in Hanoi, Vietnam
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Background: Previous studies have reported overall weight gain among HIV-positive patients immediately after starting ARV treatment, but patterns and predictors of weight change over time have not been well described. The objective of this study was to determine whether antioxidants given as adjuvant therapy with ART improve immune reconstitution, signifi cantly reduced mitochondrial damage and was associated with increased mitochondrial damage and oxidative stress. In addition, several clinical trials suggest that antioxidant and mitocnuclear supplementation improves immunologic and virologic clinical outcomes in HIV-infection. The objective of this study was to determine whether antioxidant supplementation benefits a beneficial effect on immunecomponent, and on reducing mitochondrial damage using OXPHOS Complex I (CI) and Complex IV (CIV) as biochemical surrogate markers of mitochondrial toxicity.

Methods: A cohort of 100 male, HIV-negative patients were recruited in Hanoi, Vietnam for a longitudinal study of nutrition and HIV. Subjects started HAART within 2 weeks of their baseline visit. Using a repeated measures regression model, we identified clinical and nutritional correlates of weight change over 2 consecutive 6-month intervals (INT1: pre-HAART to 6 months post-HAART; and INT2: 6 to 12 months post-HAART).

Results: Average age was 37±5 years and 48% reported recent illicit drug use at baseline. 81 completed 6-month and 68 completed 12-month followup visits. 57% were started on ZDV/3TC/Efavirenz. Mean BMI was 19.1 kg/m² at baseline. Mean weight gain was 3.1±4.8 kg in INT1 and 0.7±2.7 kg in INT2. Mean CD4 change was 65.49±55 cell/µL in INT1 and 26±100 cell/µL in INT2. In the final model, significant interactions with time interval were found for some predictors indicating differences in their effect between the two periods. Across both intervals, greater increases in CD4 and presence of nausea were both significantly associated with increased weight gain (p<0.03 for both). Diarrhea at start of interval was associated with a weight change difference of 0.3 kg in INT1 and -7.7 kg in INT2 (p=0.003 for interaction). Use of liquid supplements (e.g. Ensure or sweetened condensed milk) was associated with a weight change difference of 6.5 kg in INT1 and 0.9 kg INT2 (p=0.02 for interaction).

Conclusions: Our results show that liquid supplements may be a useful intervention for weight gain in this population, particularly in the first 6 months of ARV treatment. However, presence of diarrhea 6 months after HAART initiation needs to be addressed in order for weight gain to be sustained.

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76
MOPE0106
The impact of food assistance on weight gain and disease progression among HIV-infected individuals accessing AIDS care and treatment services in Uganda
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Background: The evidence evaluating the benefits of nutrition interventions to HIV-infected individuals in developing countries, where there is a large overlap between HIV prevalence and malnutrition, is limited. Objective: This study evaluates the impact of food assistance (FA) on change in weight and disease progression as measured by WHO staging. Methods: We utilize program data from The AIDS Support Organization (TASO) in Uganda to compare outcomes among FA recipients to a control group, using propensity score matching (PSM) methods among 14,481 HIV-infected TASO clients. Results: Food assistance was associated with a significant mean weight gain of 0.36 kg over one year period. This impact was conditional on antiretroviral therapy (ART) receipt and disease stage at baseline. A significant weight gain of 0.18 kg among individuals not receiving ART compared to their matched controls. HIV-infected individuals receiving FA with baseline WHO stage II and III had a significant weight gain (0.26 kg and 0.2 kg respectively) compared to their matched controls. Individuals with the most advanced disease at baseline (WHO stage IV) had the highest weight gain. Individuals receiving FA were 2 percentage points less likely to progress by one or more WHO stage compared to their matched controls. There were no significant impacts on either outcome among individuals receiving ART. Conclusion: Given the widespread overlap of HIV and malnutrition in sub-Saharan Africa, FA programs have potential to improve weight and delay disease progression, especially among HIV-infected individuals not yet on ART. Additional well-designed prospective studies evaluating the impact of FA are urgently needed. Presenting author email: s.kadari@cgiar.org

MOPE0107
Relationship of exclusive breastfeeding to infections and growth of Tanzanian children born to HIV-infected women
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Background: Exclusive breastfeeding has been associated with fewer episodes of respiratory and diarrheal diseases and better growth among children. Few studies have examined whether such benefits are observed among children born to HIV-infected women. Methods: We prospectively determined the incidence of respiratory, diarrheal and growth morbidities during the first two years of life among children born to HIV-1 infected women in Tanzania. Generalized estimating equations for binary outcomes were used to estimate the relative risks and 95% confidence intervals for morbidity episodes. We used Cox proportional hazards models to estimate the relative risk ratios of growth morbidities. Results: 666 children were followed for two years. Exclusive breastfeeding was associated with 51% reduction in risk of cough [RR, 0.49 (95% CI, 0.41-0.60, P = 0.001), 28% reduction in risk of cough and fever [RR, 0.72 (95% CI, 0.56-0.93, P < 0.0001)], 35% reduction in risk of cough and fever [RR, 0.65 (95% CI, 0.48-0.88, P < 0.005)], 34% reduction in risk of diarrhea [RR, 0.66 (95% CI, 0.49-0.89, P = 0.002)], 71% reduction in risk of severe diarrhea [RR, 0.29 (95% CI, 0.15-0.59, P = 0.005)], 70% reduction in risk of dysentery [RR, 0.30 (95% CI, 0.18-0.52, P < 0.001)], 51% reduction in risk of fever [RR, 0.49 (95% CI, 0.35-0.64, P < 0.0001)] and lower risk of outpatient visits [RR, 0.43 (95% CI, 0.32-0.57, P < 0.001)] during the first six months of life but had no effect in the 6-24 months of life. Exclusive breastfeeding did not significantly reduce the risks of nutritional morbidities during the first two years. Conclusions: Exclusive breastfeeding is strongly associated with reductions in the risk of respiratory and diarrheal morbidities during the first six months of life among children born to HIV-1 infected women. Presenting author email: rmwiring@gmail.com

MOPE0108
Estimates of body composition in drug naïve asymptomatic HIV-infected rural Kenyan women
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Background: Early detection of loss of fat free mass (FFM) can impact the quality of life and survival of HIV-infected patients. Anthropometry measures estimate fat and lean mass, however observer error and inefficiency for small changes are disadvantages. Bioelectrical impedance analysis (BIA) of body tissues may be preferred for monitoring serial changes in FFM over time. Methods: In 138 drug naïve women (WHO Stage 1 or 2; CD4 cell count > 250 cells/μL) measures of anthropometry (height, weight, skinfolds (SF), bioelectrical impedance analysis (BIA) [calf muscle area (MMA), mid-thigh muscle area (MTMA), mid-calf muscle area (MCMA) and sum of SF] were calculated from standard equations using BC and SF. Predicted values of FFM, percent body fat (%BF) and total body water (TBW) from BIA measures were calculated with standardized equations. Results: The mean (SD) for age, BMI and weight were 29.4(7.7) yrs, 22.3(3.6) yrs, 11% < 18.5, and 492(191) cells/μL respectively. The following correlations were found to be significant (p<0.001) using R Development Care Team (2009) software.

Conclusions: BIA, when compared to anthropometry, appears to reliably estimate fat and lean mass in drug naïve asymptomatic HIV-infected Kenyan women. We present baseline data from enrollees in an 18 month randomized nutrition intervention field trial that measures the impact of added protein and energy on body composition. Measures using both methods will be compared every 3 months throughout the intervention. Presenting author email: jernst@iupui.edu

MOPE0109
Severe food insecurity as an independent risk factor for major illness and poor functional health status among HIV-infected adults using antiretroviral therapy (ART) in Uganda
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Background: Food insecurity is associated with worse ART treatment outcomes among HIV-infected adults in North America. Data is sparse on impacts of food insecurity on HIV outcomes in under-resourced settings, and the effects of food insecurity on health-related quality of life (HRQL) in any setting. Methods: HIV-infected participants initiaring ART in Mbarara, Uganda were enrolled from the Uganda AIDS Rural Treatment Outcomes cohort, and underwent quarterly structured interviews and blood draws. Primary outcomes: a) Incident self-reported major illness generated from a list of opportunistic infections; and b) HRQL measured by the validated Household Food Insecurity Access Scale. Regression analyses were adjusted for socio-demographics, time updated CD4 count < 200, HIV RNA suppression (< 50 copies/ml), duration on ART, and under-weight (BMI < 18.5). To estimate model parameters, we used logistic regression (for self-reported illness outcome) and least squares regression (for PHQ outcome) in a generalized estimating equations framework to account for correlated observations over time. Outcomes were lagged by 3 months. Results: Beginning in May 2007, 456 persons were followed for a median of 2.07 years; 69% experienced severe food insecurity during follow-up, there were 116 new major illnesses, and the median PHQ score was 49 (IQR: 41-56). In adjusted analyses, severe food insecurity was associated with nearly three times the odds of any self-reported major illness (AOR=2.67, 95% CI=1.51-4.71, p=0.001). The mean PHQ score of subjects with severe food insecurity was 1.17 points (95% CI =0.45 to 1.89, p=0.001) less than those without severe food insecurity. Conclusions: Severe food insecurity is a risk factor for major illness and poor functional health status among HIV-infected individuals in rural Uganda even after controlling for ART response. Addressing food insecurity should be a critical component of HIV treatment programs worldwide. Presenting author email: sherli.weiser@ucsf.edu

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MOPE0110
Initial versus current nutritional status of children attending a paediatric HIV reference centre in São Paulo, Brazil
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Background: Poor growth is highly prevalent among HIV-infected. The aim of the present study was to compare initial and current nutritional status of HIV-infected children.

Methods: We carried out a retrospective study of HIV-infected children attending the Infectology Service of Children’s Institute (CI), who had been diagnosed between 1992 and 2003. Data were obtained from hospital records. To be included in the analysis all patients should be alive in July 2009 and had been followed up for at least 5 years. Hundred children (51% females) were assessed. World Health Organization growth standards were used to classify children according to their nutritional status. Paired Student’s t test was used to compare means.

Results: At admission, mean age was 2.3 years, weight 10.5 kg, height/length 79.1 cm. 42.0% presented stunting and 13.0% low BMI. Mean length/height-for-age and BMI-for-age Z-scores were -1.73 and -0.28, respectively. Age at HIV diagnosis was 2.5 years. At the last visit to CI, mean age was 13.3 years, weight 42.0 kg and height 145.6 cm. Mean time of follow up was 11.0 years. Currently 99% of patients are taking ART, stunting affected 19.0% of children and low BMI 6.0%. Mean height-for-age and BMI-for-age Z-scores were -1.0 and -0.2, respectively. There was a significant difference between initial and current height-for-age z-score (p< 0.001), however, patients still remained shorter than the reference population (Figure 1).

Conclusions: Our results demonstrate that after a prolonged follow up, patients improve their nutritional status; but, they were not able to attain optimal growth.

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MOPE0111
A study on speciation and antifungal susceptibility pattern of Candida isolates from HIV patient with oropharyngeal candidiasis and in correlation with CD4 count
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Background: Oropharyngeal candidiasis is the most common opportunistic infection observed in AIDS patients. The present study was conducted to determine the species distribution and antifungal susceptibility profiles of the candida isolates from HIV patients with oropharyngeal candidiasis.

Methods: Cross sectional study 2008-2009, with study group of 150 HIV-positive patients with oral candidiasis.150 oropharyngeal samples were collected, Blood samples were collected for enumeration of their CD4 count by FACS count. Direct microscopy by Gram stain was done. The samples were inoculated onto Sabourauds Dextrose Agar. Isolates were separated based on germ tube test, growth at 42°C, Corn meal tween 80 agar (Dalmau plate culture technique), Candida chroom agar, Sugar fermentaion test, Suger assimilation test. Antifungal susceptibility testing was done by disk diffusion method and microbroth dilution method.

Results: Candida species were isolated from all the 150 samples yielding a culture positivity of 100%. Majority of the isolates were Candida albicans (78%) and remaining were non-albicans. Among the non-albicans Candida tropicalis (11%) was the most common isolate followed by candida krusei(5%), candida parapsilosis(4%), candida glabrata(1%), candida guillermondii (1%) 92% presented with recurrent. Oropharyngeal candidiasis. By disk diffusion method, 13.8% of the candida isolates were resistant to fluconazole, 15.8% to itraconazole, 4% to ketoconazole,9% to clotrimazole and 5% to nystatin. By broth dilution, 11.8% of the Candida isolates exhibited MIC in the resistant range (>64 µg/ml) for fluconazole and 14% of the isolates exhibited MIC (>1 µg/ml) for itraconazole. Itraconazole resistant isolates were more common in patients with recurrent candidiasis. All the isolates were susceptible to amphotericin B. Out of the 150 HIV patients with oropharyngeal candidiasis, 76.6% had CD4 count less than 200 cells/µl indicating the emergence of resistant Candida isolates with immunosuppression.

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MOPE0112
Gastrointestinal parasitic infections and their correlation with CD4 counts in HIV-positive patients in tertiary care hospital in Western India
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Background: Parasitic infections of gastrointestinal tract are common in HIV-positive patients and it may be different in different parts of the world. With this in mind we studied prevalence of these infections in tertiary care Hospital in Western India.

Methods: It is Cross sectional prospective study carried out in 106 patients. They were divided in three groups, Group I (HIV-positive patients with diarrhoea, N=55), group II (HIV-positive patients without diarrhoea N=21) & group III (HIV negative patients with diarrhoea, N=30). Saline & iodine wet mounts of the stool were prepared and examined under microscope for trophozoites, cysts, eggs and larva of helminthias. CD4 counts were performed by FACS. Data was analyzed by SPSS.

Results: Mean age of the patients was 35 years with male to female ratio of 4:1. Non-opportunistic helminthes infections like Ascari, Ancylostoma, Giardiasis and Amebiasis were present in 18.18% of group I, 9.5% in group II and 30% in Group III. While opportunistic infections like cryptosporidium and isospora present in 20% in group I (Isospora in 81.82% and cryptosporidium in 18.18%) & nil in group II & III. No group had infections like microsporidium, cyclospora or strongyloides. Mean CD4 counts was 176.08 ± 22.03 in group I and 237.2 ± 7.8 in group II.

Conclusions: Opportunistic infections are the common causes of diarrhea in HIV-positive patients compared to Non opportunistic infections (P = 0.001) especially when CD4 counts drops below 200. Isonpora is the common cause of diarrhea in HIV-positive patients in this part of world. Long term viral suppression population where cryptosporidium is the common infection.

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MOPE0113
Increased risk of progressive multifocal leukoencephalopathy in HIV-infected patients with liver cirrhosis and long term viral suppression
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Background: Progressive multifocal leukoencephalopathy (PML) can develop rarely in patients with full viral suppression resulting from antiretroviral therapy (ART). Here, we report three patients in whom PML occurred with long term viral suppression.

Methods: Retrospective single center analysis from January 2002 to July 2009. PML has been diagnosed when clinical and magnetic resonance imaging findings were consistent with the disease and JC virus DNA was found in cerebrospinal fluid.

Results: Among 611 patients, there were 8 PML cases during 3358 person-years of follow up. The overall incidence rate was 2.4 per 1000 person-years (95% CI, 1.2-4.7); three were ART naive, one patient developed PML shortly after starting ART, one patient on chronic ART with HIV-1 viremia and three patients on chronic ART with undetectable viral load. The latter three also suffered from liver cirrhosis (one with hepatitis B and two with hepatitis C). At time of diagnosis of PML they have been classified in Child-Pugh category C, C, and B, respectively, and their CD4 count then was 588, 117 and 207 cells per µl, respectively. The incidence rate for PML in patients without liver cirrhosis was 1.6 per 1000 person-years (95% CI, 0.7-3.8) compared to 12.2 cases per 1000 person-years (95% CI, 4.2-35.4) in patients with liver cirrhosis. The relative risk of PML in patients with liver cirrhosis compared to those without was 7.62 (95% CI, 1.8-31.7). Two patients died (one and eight months after diagnosis) and one is alive nine months after diagnosis. Diagnosis was delayed because PML was mistaken for stroke, chronic sequela of a head trauma, and severe hepatic encephalopathy, respectively.

Conclusions: The small number of patients presented precludes firm conclusions. Arriving at a diagnosis of PML may be challenging in patients with liver cirrhosis, and may delay the time for a stroke or another cirrhosis-related disorder may occur more frequently than anticipated.

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MOPE0114

Efficacy and safety of preemptive anti-cytomegalovirus therapy (PACT) in HIV-infected patients with detectable blood CMV DNA

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Background: Detection of CMV viremia is associated with an increased risk of CMV end-organ disease (CMV- EOD) and death among HIV-infected patients. Whether PACT reduces this risk is still debated.

Methods: In this retrospective, monocentric study, patients with a detectable CMV DNA in whole-blood between 01/2007 and 12/2007, were analyzed. Patients’ charts were reviewed to look for PACT, occurrence of CMV- EOD and death. Associations between PACT and occurrence of CMV- EOD or death were analyzed using Cox models.

Results: Among 2617 patients followed in our institution, 71 had a CMV viremia. Sixteen (22.5%) patients received PACT (ganciclovir/varganciclovir (n=14), foscarnet (n=1), combined treatment (n=1)) and 55 did not. The median duration of PACT was 21 days. At baseline, median age was 44 and 43 years, median CD4 cell count: 26 and 80/mm³, median blood CMV DNA level: 5 and 3.2 log10/copy/ml, CDC stage C B B and 63, HAART for 50% and 55% of patients with or without PACT, respectively. After a median follow-up of 14 months, 8 patients (11.2%) developed CMV-EOD (5 with PACT, 4 without), and 11 died (4 with PACT, 7 without). These events occurred after a median of 75 days, with no significant difference between groups. PACT and blood CMV DNA levels were significantly associated with CMV-EOD and death in univariate analysis. In adjusted analyses, blood CMV DNA levels remained significantly associated with the risk of CMV-EOD and death (HR=4.47 [p=0.0018]), whereas PACT showed a trend toward a decreased risk of CMV-EOD and death (HR=0.25 [p = 0.13]).

Conclusions: Our study confirms that high levels of CMV viremia are strongly associated with the risk of CMV- EOD and death. However, the use of PACT does not significantly reduce these risks and carries significant toxicities and costs.

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MOPE0115

Case fatality due to cryptococcal meningitis in a retrospective cohort in Kenya

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Background: Cryptococcal meningitis (CM) is a leading cause of mortality among HIV-infected patients, though little published data exists for Kenya. Our objective was to determine key predictors of case-fatality due to CM at Family AIDS Care and Education Services (FACES), an HIV prevention, care and treatment program in western Kenya.

Methods: Chart reviews were performed on HIV-positive patients enrolled in FACES who had a positive serum cryptococcal antigen test (sCrAg) between 2006 and 2009. We evaluated associations between case fatality and various clinical characteristics using Fisher’s exact test for dichotomous variables and logistic regression for continuous variables. Limited multivariate logistic regression modelling was performed. We analysed the relationship between case fatality rates and key variables using different definitions of CM.

Results: Charts were reviewed for 78.5% (51/65) of patients who had a positive sCrAg. Overall case-fatality was 49%. Mean age was 35 years, 57% were male, median CD4 count at diagnosis was 42 cells /µl, and median BMI was 1.7. Case-fatality was lower among individuals with higher BMI (OR=0.76; p=0.02) and who started ARVs at least 2 weeks prior to sCrAg test (p=0.04). No associations were observed between current and previous use of antiretrovirals, elevated current and CD4 count, type of antifungal treatment, or any signs or symptoms of meningitis. In multivariate models, higher BMI remained significantly associated with lower case-fatality. Sensitivity analysis using more stringent clinical definitions of CM did not demonstrate significant differences in overall case-fatality (p>0.95) or different bivariate relationships.

Conclusions: Among HIV-positive outpatients receiving care in FACES, CM had a high-case-fatality, efforts to reduce it should include improving access to antiretroviral drugs. Future research should further explore the relationships between case-fatality and immune status and anti-fungal therapies.

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MOPE0116

Fatal invasive trichosporonosis in a Filipino AIDS patient

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Background: Disseminated Trichosporon infection is a rare, life-threatening infection in immunocompromised patients. It has been reported as an emerging opportunistic infection in those with Acquired Immunodeficiency Syndrome (AIDS). Only eight cases of disseminated trichosporonosis in patients with HIV have been documented, none in Southeast Asia.

Methods: A case report.

Results: A 28-year-old Filipino male presented with flesh-colored papules on the face and neck, eventually progressing into hemorrhagic crusts which ulcerated over the course of two months (Figure 1). He was diagnosed with HIV in 2006, but did not start antiretrovirals and was lost to follow-up until 2009 when he was confirmed with Pneumocystis pneumonia. At that time, his CD4 count was 3 cells/µl.

(Figure 1)

He was treated as disseminated cryptococcosis due to the presence of yeast cells on skin biopsy. Serum cryptococcal latex agglutination test (CALAS) was reactive at 1:8. CSF CALAS was negative. Despite antifungal therapy with amphotericin, fluconazole and itraconazole, the patient progressively deteriorated and expired.

After eight weeks of incubation, two weeks after the patient died, sputum and skin tissue cultures grew Trichosporon sp.

Conclusion: We present the first disseminated Trichosporon infection in a Filipino AIDS patient. It can mimic cryptococcosis with CSF CALAS and an falsifying CALAS. Appropriate treatment depends on a high level of suspicion; prognosis remains poor.

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MOPE0117

Comparative study of terminal opportunistic infections in HIV/AIDS, in pre and post HAART era: a needle necropsy study

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Background: There are limited needle necropsy/autoopsy studies comparing the terminal infections in HIV-positive patients before and after introduction of HAART.

Aim: To analyze and compare the pattern of opportunistic infections (OI) events at the time of death in HIV-positive patients in pre- and post-HAART era.

Methods: In this retrospective study needle necropsy records of all HIV patients from 01 January 1999 to 31 December 2000 and from 01 September 2005 to 31 August 2007 were studied. Needle necropsy samples of liver, lungs, brain, spleen, kidneys, testis and body fluids were obtained and subjected to microbiological, biochemical and cytological examination. Blood culture for pyogenic organisms and mycobacteria was also carried out.

Results: Needle necropsy records of 68 patients were examined retrospectively. There were 45 patients from 1999-2000 (pre-HAART) group and 23 patients from 2005-07 (post-HAART) group. Except one patient in each group all the patients had some opportunistic infection/event. Tuberculosis was the commonest OI. Disseminated tuberculosis was common in both groups. Only one patient from pre-HAART group was detected to have atypical mycobacterial infection. Disseminated cryptococcal infection (10 cases) was found only in patients of post-HAART era. Disseminated candidiasis was the next common opportunistic infection. Pneumocystis jiroveci, toxoplasmosis, histoplasmosis, and lymphoma (2 cases each) were found only in the patients of pre-HAART group.

Conclusions: Although Tuberculosis continues to be commonest OI, incidence of localized form of disease seems to be higher in post HAART era. It appears that the HAART leads to reduction in the incidence of cryptococcosis and the other opportunistic infections practically disappear. This information can be of immense use for clinicians treating the seriously ill HIV-positive patients.

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MOPE0118 Visceral leishmaniasis (VL) relapse in a cohort of HIV-coinfected patients in Brazil
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Background: Although in Brazil VL-HIV coinfection is common, few studies had described this population, secondary prophylaxis use and relapse. This retrospective cohort study assess descriptive characteristics and relapse rate of VL in HIV-coinfected patients.
Methods: Patients (n=30) were followed up during 12 months after treatment of the primary VL episode in a public hospital in Belo Horizonte, Brazil, from 2003 through 2008. Clinical, behavioral and demographic data were collected from medical charts. VL relapse was defined as recrudescence of clinical symptoms and the presence of Leishmania amastigotes in positive diagnostic examination during the follow-up. Cox's proportional hazard model was used for analysis.
Results: Relatíty rate of VL in the first episode was 30%. Among the 21 patients who completed follow-up, relapse rate was 33%. Among the patients who used VL prophylaxis (n=9), 11% relapsed, compared to 50% among those who did not use (n=12). (p-value=0.14). Most participants were male (75%), without history of IDU (97%), lived in the state capital metropolitan area (84%) and mean age was 28 years old. Most patients (83%) had an AIDS-defining condition before or at the time of primary VL episode. Mean CD4 cell count at baseline was 200 cells/mm³. Median time of HIV diagnosis was 10 months. For all the 7 patients who relapsed, ART had been indicated after the first episode, but 6 of them where considered non-adherent and 5 had treatment failure before the VL relapse. Their mean CD4 cell count was 107 cells/mm³, at the moment of the relapse.
Conclusions: Relatíty rate of VL among HIV-patients is higher compared to the general population. Secondary prophylaxis is important to prevent VL relapse and usual antibiotic prophylaxis is not enough. Long-term follow-up and evaluation of ART adherence is needed to better understand the mechanism of relapse.

MOPE0119 Treatment options for HIV infected children presenting with ear infections at an HIV pediatric care centre in Uganda
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Issues: Ear discharge is one of the commonest presenting complaints by children at the Baylor Uganda COE. Current MDG guidelines recommend use of cotrimoxazole, amoxicillin or ampicillin as the first line treatment for acute ear infection and chloramphenicol for chronic ear infections. This study evaluates the most common bacteria isolated from ear swab specimens and highlights antibiotic sensitivity patterns in regard to the guidelines.
Description: Microbiology laboratory data for the period Jan 2006 to Novem-ber 2009 was retrospectively reviewed and results of gram and, Zeihl Neelsen stain were collated from electronic and clinical records.
Methods: 421 ear swab specimens were collected from 2006 to 2010. Organisms were isolated in 428 (21.8%) ear specimens, Proteus species in 425 (65.8%), pseudomonas species in 24 (6.1%), and staphylococcus species in 7 (1.0%). 239 (45.5%) were Gram negative, 7 (1.0%) were mixed and 190 (35.8%) were Gram positive. Organisms were susceptible to ceftazidime (91.7%), cefuroxime (93.9%), ceftriaxone (83.7%) Ciprofl oxacin (79.5%), Gentamycin (69.3%), cefotaxime (61.3%) and Amoxiclav (56.0%), while 89.6%, 85.1% and 70% were resistant to Cotrimoxazole, Ampicillin and Chloramphenicol respectively.
Conclusions: Based on this study, Proteus species was the commonest bacteria isolated from ear swab specimens; the majority of bacteria were susceptible to expensive or not safe-in children antibiotics. Ear infections among children attending Baylor-Uganda COE were resistant to Cotrimoxazole, Ampicillin and Chloramphenicol respectively. Further research on the efficacy of second line treatment options is needed on this population.

MOPE0120 Cryptococcal antigen and CNS disease in the HAART era in a UK inner city population
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Background: The incidence of Cryptococcal disease has declined in the era of highly active anti-retroviral therapy (HAART), but remains an important opportunistic disease.
Methods: We retrospectively identified all cryptococcal antigen (CrAg) posi-tive patients (2002 to 2010) from a hospital with an HIV cohort of 2650. We collated data from electronic and clinical records.
Results: 35 CrAg positive patients were identified, 4 without HIV (2 had malignancy, 2 had autoimmune disease). 13/31 HIV-positive patients had proven CNS disease; 11 India Ink positive, 2 negative (1 culture positive, 1 CSF CAg positive). 10/13 were male, 8/13 were Caucasian and 5/13 were black African. The median CD4 count at diagnosis was 277 (8-305). 2/13 had fun-gaemia, 3/13 had lymphoid infection. Median lumbar puncture (LP) opening pressure (OP) was 140 (14-40), median number of LPs performed was 5 (1-32), 1.13 had a lumbo-peritoneal shunt and 1/13 received steroids with acetazolamide to manage high intracranial pressure (ICP). 10/13 were HAART naïve at presentation. 2/13 presented within 1 week and 1 after 112 days of HAART. In naïve patients, HAART was commenced a me-dian of 27 days (8-49) after presentation. 2/13 occurred after 15 and 18 days. At IRIS, mean LP OP was 53.5 cm H₂O and mean CD4 count 47/ml, both were CFU culture negative.

Tuberculosis MOPE0122-MOPE0154
**MOPE0123**

**HIV infection and lung disease**

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**Background:** Characterize the population with HIV infection hospitalized in Pulmonology and Medical Departments of Faro Hospital; determine the pulmonary complications that led to hospitalization, relate CD4 count with pulmonary findings, determine in how many the diagnosis of HIV infection was made during hospitalization: and determine the percentage by which the pulmonary complications to AIDS are related to lung injuries in the principal diseases.

**Methods:** Analytical, cross-sectional, retrospective study of patients diagnosed of HIV hospitalized in the Pulmonology and Medical Departments from 1/1/2006 to 31/12/2008. Variables analysed: gender, age, nationality, risk behavior; CD4 T lymphocyte count, date of diagnosis of HIV infection, pulmonary diagnosis, radiological pattern and mortality.

**Results:** Of the 424 admissions: 76.7% were male, mean age 41 years. 4 patients had infection by HIV2. The main risk behavior was intravenous drug users (48.5%). The diagnosis of HIV infection was performed at the time of admission in 32 patients (15.6%). The most frequent diagnosis was Community Acquired Pneumonia (CAP) (37.4%). Most patients (65.6%) had values of CD4 < 100/mm3, CAP (39.5%) was the most frequent pulmonary pathology most frequent, in patients with CD4 lymphocytes < 200/ mm3 the most frequent pathology was the CAP and PPN (32.7%). Forty-nine patients (38.7%) had criteria of AIDS during hospitalization. Concerning the most frequent radiographic pattern, in CAP was the consolidation (50.8%), in the respective degree of immune suppression; in PPN infiltrate (95.7%) was the most frequent radiologic pattern; in tuberculosis predominated the cavitations (41.4%). Most patients had clinical improvement and 14 patients died.

**Conclusions:** The most frequent diagnosis was CAP. When CD T lymphocytes were < 200/mm3, PPN was the principal diagnosis, when CD4 T lymphocytes > 200/mm3, the principal diagnosis was CAP. The most frequent disease that constitutes criteria of AIDS is PPN. In a significant number of patients the HIV infection was performed at admission.

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**MOPE0124**

**Usefulness of abdominal ultrasound in initial work up of HIV patients**

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**Background:** Universal recommendations about initial work up of HIV patients do not include abdominal ultrasound. Chance observation of lymphadenopathy was not present in any subject with TB. Previous clinical trials testing the value of vitamin D for patients with TB limited by small sample size or non-invasive test during initial work up of HIV infection is worth considering.

**Results:** The mean 25(OH)D level was 26 ± 10 ng/mL among all 150 participants. Vitamin D deficiency (< 15 ng/mL) was present in one (2%) healthy controls but none of the patients. Vitamin D deficiency is present in one (2%) healthy control.

**Conclusion:** Deficiency of vitamin D is present in one (2%) healthy control.

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**MOPE0125**

**Is annual tuberculin test appropriate for all HIV-infected patients?**

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**Background:** It has been recommended that regular tuberculin skin tests (TST) be done for all HIV-infected patients. However, the optimal frequency of such test is unknown.

**Methods:** Annual TSTs were placed for all patients of an HIV clinic in a TB-endemic region. Those with latent infection were treated with isoniazid.

**Results:** From Jan 2003 to Oct 2009, 767 patients with consistently negative TSTs, 14 developed TB disease at a mean of 288 days after the first negative TST. Compared with those who did not develop TB, they had a lower baseline CD4 count (93 vs 269 cells/mm3, P=0.046), higher baseline viral load (275,000 vs 37,000 copies/mL, P=0.002) and higher likelihood of history of AIDS-defining illness (43% vs 1%, P< 0.0001). Eighty (57%) developed TB within 4 months (median 2.5 months) after the last negative TST, and the rest at a median of 12 months. Those with negative TSTs and no TB disease were followed for a mean of 954 days.

**Conclusions:** Certain patient characteristics may be identifiable that determine the optimal frequency of TST, which can range from every 2.5 years.

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**MOPE0126**

**Challenges to optimal integration of TB and HIV services in rural clinics in Northern Nigeria**

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**Issues:** Integration of TB and HIV services has been shown to improve health outcomes of HIV care and treatment. However, attempts at integration have shown a variety of results in sub-Saharan Africa where many TB and HIV services are run as parallel programs. This study highlights operational challenges encountered in TB/HIV service integration in rural clinics in Nigeria.

**Conclusion:** The USAID-supported PROCT project of management for health provides HIV care and treatment services in 23 clinics in 6 states of Nigeria. We conducted a rapid assessment of TB/HIV services in 16 secondary health facilities with the aim of ascertaining the quality of integrated TB/HIV services. A structured questionnaire was administered to health facility focal persons, and clinicians. Data was collated and analyzed.

**Challenges identified at the facilities include:**

- Sub-optimal TB screening for HIV infected patients (68%), lack of tools for documenting services (25%).
- lack of diagnostic equipment (62%) and lack of functional TB infection control committees (75%).

A feedback system was established to communicate the findings of this assessment to facility staff as well as policy makers.

**Lessons learned:** The assessment identified several operational challenges to optimal TB/HIV service integration. High levels of routine TST screening present an opportunity for scale up; however scaling up of services must be complemented by strengthening the TB diagnostic and treatment facilities.

**Next steps:** Strategies for addressing challenges to optimal TB/HIV service integration in sub-Saharan Africa are urgently needed.

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**MOPE0127**

**Low and falling body mass index predict HIV-associated tuberculosis: results from a prospective study in Tanzania**

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**Background:** Body mass index (BMI) is a known risk factor for tuberculosis in people without HIV, but no prior study to our knowledge has been done to study the relation of BMI to the risk of TB in people with HIV.

**Methods:** In HIV-infected adults with CD4 counts ≥ 200 cells/µl receiving placebo in a novel tuber vaccine trial, we measured BMI at baseline and at the year 1 visit, and related baseline BMI and change in BMI to the development of tuberculosis in subsequent TB using univariate analyses as well as a multivariate Cox regression model.

**Results:** We documented 92 cases of TB among 979 placebo subjects followed for a mean of 3.2 years. Compared to subjects who did not develop TB, those who developed TB had a lower baseline BMI (P=0.006), and a significantly greater BMI change from baseline to year 1 (change in BMI -0.4 vs. 0.8 kg/m², P= 0.001). Baseline BMI correlated significantly with the baseline CD4 count (r=0.27), but there was no correlation between the change in BMI from baseline to year 1 with the change in CD4 count from baseline to year 1 (Spearmann rho -0.0945, P value 0.1437). In multivariate analyses, baseline BMI was associated with the risk of subsequent TB (hazard ratio (HR) 0.94, 95% CI 0.90-
MOPE0128
Development of a standardized screening algorithm for tuberculosis in people living with HIV in resource constrained settings: individual patient data meta-analysis


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Background: The World Health Organization recommends screening of all people living with HIV for tuberculosis (TB) disease, following by TB treatment, or isolated preventive therapy (IPT) when TB is excluded. However, uncertainty concerning screening accuracy has severely limited IPT uptake in resource-limited settings. We conducted an individual patient data meta-analysis, aiming to identify a sensitive TB screening tool.

Methods: We identified 12 studies which had systematically collected: spu- tum specimens regardless of signs or symptoms; at least one mycobacterial culture; clinical symptoms; HIV and TB disease status. We calculated the screening performance of all combinations of variables of interest.

Results: The screening performance of all combinations of variables of interest is as follows: sensitivity of 70% and specificity of 97% among those with TB disease; 84% sensitive and 28% specific among those with CD4 count below 200; 68% sensitive and 24% specific among those with CD4 count above 200.

Conclusions: The rule in all populations with radiological data. normal radiographic fi ndings increased sensitivity but decreased specifi city of settings; and 88% sensitive and 27% specifi c among those with CD4 count below 200.

MOPE0129
Comparison of T-cell based interferon-y release assay and tuberculin skin test results for the prediction of active tuberculosis disease in HIV-1 infection

M.C. Aichburg1, J. Tittes1, A.C. Aichburg2, G. Stingl1, A. Rieger1, M.C. Aichelburg1,1-infected subjects at risk for progressing to active TB disease and provides a reference hospital in Rio de Janeiro.

Background: The ideal dose of efavirenz to be used concomitantly with rifampi- cin to treat tuberculosis (TB) and HIV-positive patients is still unclear. The aim of this study was to compare efficacy and safety of TB and HIV therapy with rifampicin and efavirenz using two different doses (600 and 800mg).

Methods: HIV-positive TB patients aging more than 18 years were recruited to participate in an open-label randomized, controlled trial. Treatment arms consisted of 600mg or 800mg efavirenz after randomization for 600 group (1) or 800mg (group 2).

Results: We included 63 patients, 12 women and 51 men. Median age was 38 years. Disseminated TB was diagnosed among 32 cases and 33 patients used 800mg efaviren. Both groups were similar according to baseline VL, CD4 counts and prevalence of disseminated TB. The median viral copy number (VL) at 24 weeks was 3900 copies/mL and 4240 copies/mL after 6 months of ART.

Conclusions: It seems that both dosages are similar in terms of efficacy and safety at that point of the study.

MOPE0130
Pulmonary tuberculosis among HIV seropositive intravenous drug users attending a tertiary care centre in Eastern Nepal

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Background: According to WHO an estimated one third of the persons living with HIV infection are coinfected with TB, with majority residing in resource constrained countries. TB accounts for up to a third of AIDS deaths worldwide. Risk of active tuberculosis is elevated amongst HIV seropositive intravenous drug users (IVDU).Objective of the present study was to determine the preva- lence of pulmonary tuberculosis (PTB) among HIV seropositive IVDU attend- ing BPKIH, Eastern Nepal.

Methods: All HIV seropositive patients with history of IVDU attending Depart- ment of Microbiology, BPKIH for CD4+ testing were included. Constitutional symptoms including fatigue, cough, low grade fever and gradual weight loss were recorded. Early morning sputum on 3 consecutive days were collected and processed for Acid Fast Bacilli (AFB) staining, and were graded according to national tuberculosis centre (NTC), Nepal guidelines. Data were recorded in MS excel worksheet and prevalence was determined in terms of percentage.

Results: All together 86 patients were enrolled over the duration of one year, of which 84(97.67%) were male and 2(2.33%) were female with mean age of 32.13 years. Spumon smear positive for AFB was 12(13.95%), of which 5(41.66%), 6(50%), 7(58.33%) and 10(83.33%) had constitutional symp- toms of gradual weight loss, fever, cough and fatigue respectively. Average CD4+ count among smear positive was 256.66 with 6(50%) of them having CD4+ count below 200 and 4(46.66%) having all the symptoms.

Conclusions: Coinfection of Pulmonary tuberculosis with HIV among IVDU is high and almost half of them with CD4+ count on the lower side. For effective management, asymptomatic patients should also be screened and detailed re- search may be required to establish IVDU as a risk factor of active TB among HIV seropositive IVDU.

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MOPE0131
A randomized open label clinical trial to evaluate two dosages of efavirenz (600 and 800mg) in patients treated for tuberculosis with rifampicin at a reference hospital in Rio de Janeiro

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Background: Coinfection of Pulmonary tuberculosis with HIV among IVDU is high and almost half of them with CD4+ count on the lower side. For effective management, asymptomatic patients should also be screened and detailed re- search may be required to establish IVDU as a risk factor of active TB among HIV seropositive IVDU.

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MOPE0132
Timing of antiretroviral therapy (ART) in HIV and tuberculosis co-infected patients

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Background: The appropriate time to initiate ART in HIV/tuberculosis co-infected patients is unknown.

Methods: This retrospective cohort study utilized data from electronic records of HIV-infected patients enrolled at USAID-AMPATH Partnership, western Ken- ya. HIV/tuberculosis co-infected patients were categorized into 5 groups based on timing of ART initiation: 0-2weeks; 2-8weeks; 8-16weeks; 16-35weeks; and, never started ART. Marginal structural models (MSM) were used to charac- terize the effect of timing of ART initiation on time to ART discontinuation and rate of new opportunistic infection (OI). Inverse probability weighting (IPW) was used to control for measured confounding attributable to age, gender, marital status, employment, post-primary education, rural vs. urban clinic attendance, CD4, weight, AIDS defining illness and WHO stage.

Results: A total of 8,810 HIV/tuberculosis co-infected adults enrolled be- tween 1st March, 2004 and 18th April, 2008. Of these, 5,856 (58% males; me-
One-year RR for OI and HR for mortality reached 40 HIV RNA copies per mL within 9 months. 14% had CD4 counts reached 500 cells/µl (group 1) and 40 patients received Emtricitabine and Tenofovir and Efavirenz daily. ART was initiated at GHTM and also compares the types of TB and CD4 counts during both episodes. Results: Sample size was 2032 of which 1032 (51%) were cases and 999 HIV-positive (cases) and negative (controls) patients above 18 years of age. Background: World wide, recurrent TB is higher among HIV-positive (6.7%) than among HIV-negative patients (3%). In India, one published study showed a recurrence rate of 15% among HIV-positive patients as compared to only 3% among HIV negative patients. This record based case control study compares the prevalence of recurrent TB among HIV-positive and negative patients admitted at GHTM and also compares the types of TB and CD4 counts during both episodes. Methods: HIV-positive (cases) and negative (controls) patients above 18 years of age who attended four HIV clinics in Guangxi between Aug 2006 and Mar 2008 were evaluated for active PTB with physical examination, Chest X-ray(CXR), sputum smear and/or sputum liquid culture. Baseline characteristics were described using median(interquartile range, IQR) and frequencies. Univariate and multivariate logistic regression analyses were performed to identify demographic and clinic factors associated with asymptomatic PTB. Results: Among 349 subjects with CD4< 350 cells/mm³, 15(4.4%) were diagnosed with PTB, of which 8(53%) had positive sputum culture and 4(27%) positive sputum smear. In univariate regression models, intravenous drug use, BMI> 18, CD4 > 50 and presence of peripheral lymphadenopathy are associated with an increased risk of PTB, while in multivariate analysis only peripheral lymphadenopathy and a history of PTB had statistical significance (OR=7.8, 95%CI 1.4-42). Patients with negative smear and minor or no abnormality on CXR waited longer between screening and TB treatment. In addition, non-tuberculosis mycobacterium was identified in 4 cases by sputum culture, one of which was initially misdiagnosed as TB by sputum smear. Conclusions: PTB is relatively common in this group of HIV-positive asymptomatic Chinese patients. Diagnosis is challenging especially where liquid culture is unavailable. The integration of enhanced PTB evaluation and transmission prevention with HIV care in China is needed at the levels of households and health care facilities, especially among patients at high risk for PTB. Presenting author email: kyyssy@gmail.com

MOPE0134
Prevalence of recurrent TB among PLHA - a record based case control study at GHTM, Tambaram, South India
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Background: World wide, recurrent TB is higher among HIV-positive (6.7%) than among HIV-negative patients (3%). In India, one published study showed a recurrence rate of 15% among HIV-positive patients as compared to only 3% among HIV negative patients. This record based case control study compares the prevalence of recurrent TB among HIV-positive and negative patients admitted at GHTM and also compares the types of TB and CD4 counts during both episodes.

Methods: HIV-positive (cases) and negative (controls) patients above 18 years of age who attended four HIV clinics in Guangxi between Aug 2006 and Mar 2008 were evaluated for active PTB with physical examination, Chest X-ray(CXR), sputum smear and/or sputum liquid culture. Baseline characteristics were described using median(interquartile range, IQR) and frequencies. Univariate and multivariate logistic regression analyses were performed to identify demographic and clinic factors associated with asymptomatic PTB.

Results: Among 349 subjects with CD4< 350 cells/mm³, 15(4.4%) were diagnosed with PTB, of which 8(53%) had positive sputum culture and 4(27%) positive sputum smear. In univariate regression models, intravenous drug use, BMI> 18, CD4 > 50 and presence of peripheral lymphadenopathy are associated with an increased risk of PTB, while in multivariate analysis only peripheral lymphadenopathy and a history of PTB had statistical significance (OR=7.8, 95%CI 1.4-42). Patients with negative smear and minor or no abnormality on CXR waited longer between screening and TB treatment. In addition, non-tuberculosis mycobacterium was identified in 4 cases by sputum culture, one of which was initially misdiagnosed as TB by sputum smear.

Conclusions: PTB is relatively common in this group of HIV-positive asymptomatic Chinese patients. Diagnosis is challenging especially where liquid culture is unavailable. The integration of enhanced PTB evaluation and transmission prevention with HIV care in China is needed at the levels of households and health care facilities, especially among patients at high risk for PTB.

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MOPE0135
Diagnosis of pulmonary tuberculosis among asymptomatic HIV+ patients in Guangxi, China
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Background: Prevalence and risk factors of pulmonary tuberculosis (PTB) among asymptomatic Chinese patients with HIV infection have not been thoroughly examined despite high tuberculosis burden in China.

Methods: All asymptomatic adult HIV-infected patients with CD4> 350 cells/mm³ who attended four HIV clinics in Guangxi between Aug 2006 and Mar 2008 were evaluated for active PTB with physical examination, Chest X-ray(CXR), sputum smear and/or sputum liquid culture. Baseline characteristics were described using median(interquartile range, IQR) and frequencies. Univariate and multivariate logistic regression analyses were performed to identify demographic and clinic factors associated with asymptomatic PTB.

Results: Among 349 subjects with CD4< 350 cells/mm³, 15(4.4%) were diagnosed with PTB, of which 8(53%) had positive sputum culture and 4(27%) positive sputum smear. In univariate regression models, intravenous drug use, BMI> 18, CD4 > 50 and presence of peripheral lymphadenopathy are associated with an increased risk of PTB, while in multivariate analysis only peripheral lymphadenopathy and a history of PTB had statistical significance (OR=7.8, 95%CI 1.4-42). Patients with negative smear and minor or no abnormality on CXR waited longer between screening and TB treatment. In addition, non-tuberculosis mycobacterium was identified in 4 cases by sputum culture, one of which was initially misdiagnosed as TB by sputum smear.

Conclusions: PTB is relatively common in this group of HIV-positive asymptomatic Chinese patients. Diagnosis is challenging especially where liquid culture is unavailable. The integration of enhanced PTB evaluation and transmission prevention with HIV care in China is needed at the levels of households and health care facilities, especially among patients at high risk for PTB.

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MOPE0136
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Background: Tuberculosis is becoming a public health problem in Central Af- rican Republic. Its incidence is increasing 65 % and most of them are young. The HIV prevalence rate is 6,2 % and it ranks the country to the 9th place in the world and at the first place in Central Africa. In spite of the necessity of struggling against tuberculosis in the countries of the millennium, there is still a major deficit of informations from communal associations on tubercu- losis.

Methods: Show the interest of the implication of the communal agents in the follow up of the Tuberculosis patients with positive microscopy under treatment directly observed - Retroactive study 2007-2008 comes from the register data of the tubercu- losis treatment. - Insertion criteria, tuberculosis patients confirmed by the bacilloscopy and followed up by a volunteer. - 35 involved volunteers in the treatment process observed directly. - Communal agents’ report data from the number of tuberculosis patients fol- lowed on the treatment observed directly.

Results: - 820 tuberculosis patients visited to the observed directly treated - 513 women (62 %) and 307 men (38 %) - Median age 14 to 24 years old - 420 did control of the second month, 5th month and 8th month of treatment - 336 completed treatements - 18 Failure cases and treatment restarted - 22 dead cases registered - 20 transferred cases - 14 lost cases (1.7 %)

Conclusions: Appeal for communal agents’ activities raise because of the good results obtained. Communities are important in the success of the treat- ment process strategy of tuberculosis patients. Presenting author email: dorabjee@mediohotel.yapho.fr

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MOPE0137
Clinical, biological and therapeutic determinants of tuberculosis treatment outcome in a cohort of TB/HIV co-infected patients followed in the public sector in Mandalay, Myanmar
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Background: TB/HIV co-infection is well described. Determinants of mortality, including antiretroviral (ART) initiation timing to TB treatment, are scarcely reported. The Union supports a HIV care program for TB/HIV co-infected patients.

Methods: Patients’ charts were extracted for demographic, clinical, biological data, ART timing and outcomes during TB treatment. Outcomes were classified as favorable (cure, completed) and unfavorable (death, default-ers) and compared using χ² test.

Results: From 16/05/2005 until 31/1/2009, 1600 TB/HIV co-infected patients (mean age: 35 years; 77% males); baseline median CD4: 110 (58-183) cells/µl; BMI: 18 [16-20]; Hemoglobin: 10 g/dl [9-12] were enrolled. In 821/1600 (51%) patients, median time of ART initiation timing to TB treatment is 76 days [53-110]; 106 (6%) patients< 2 months; 559 (68%) patients< 6 months. In 779/1600 (49%) patients, no ART was started during TB treatment.

Conclusion: Favorable/unfavorable outcomes were 762 (54%)/46 (28%); 582 (43%)/120 (7%) for the antiretroviral started during TB treatment or not, respectively. In a multivariate analysis, female gender (OR: 1.55; 95% CI: 1.04 to 2.33; p=0.03), BMI <18 (OR: 1.59; CI: 1.24 to 2.76; p=0.05); baseline CD4 count <100 cells/µl (OR: 1.74; CI: 1.14 to 2.67; p=0.01); hemoglobin level <9.4 g/dl (OR: 2.51; CI: 1.68 to 7.35; p=0.05); history of TB (OR: 3.33; CI: 2.04 to 5.46; p<0.05), no ART initiation during TB treatment (OR: 2.86; CI: 1.89 to 4.32; p<0.05) were predictive of unfavorable outcomes. Various timings of ART during TB treatment were of no statistical significance.

Conclusion: Female gender, baseline BMI, CD4 count, hemoglobin level, history of TB, no ART initiation during TB treatment are predictive of unfavorable outcomes among TB/HIV co-infected patients. For a good, larger much sample size is needed to differentiate the effect of various ART during anti-TB treatment.

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MOPE0139
A prospective cohort study evaluating changes in CD4 counts during the intensive phase of treatment of tuberculosis in HIV antiretroviral therapy (ART) naïve patients at the Coast Province General Hospital (CPGH), Mombasa, Kenya
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Issues: Patients commencing treatment for Tuberculosis (TB) often have initiation of HAART deferred until after completion of intensive phase therapy. The aim of the study was to evaluate the changes in CD4 counts (a measure of immune function) in HIV treatment naïve patients during intensive phase of treatment of TB and to assess the usefulness of Total Lymphocyte Count (TLC) as a surrogate marker of CD4 count in HIV/TB co-infected patients.

Description: A prospective cohort of 53 HIV/TB co-infected patients, anti- retroviral (ARV) naïve were recruited from the TB clinic at the Coast General Hospital, Mombasa, Kenya between 19th September 2008 and 4th May 2009. Sequential CD4 counts were taken during the intensive phase of treatment of TB at, baseline, week 4 and week 8. Correlation between TLC and CD4 count was determined at baseline and week 8.

The mean and median baseline CD4 counts for the cohort were 295 cells/mm³ and 231 cells/mm³ respectively. These improved significantly at week 4 (mean 337 cells/mm³; p=0.019 and median 269 cells/mm³; p=0.02) and week 8 of intensive phase of therapy of TB (mean 343; p=0.001 and median 299; p=0.001). The mean TLC of the cohort was 1665 cells/mm³ at baseline and 1836 cells/mm³ at week 8. A non-significant correlation was observed between TLC and CD4 count at baseline (r = 0.2, p=0.225) and at the end of intensive phase of treatment of TB (r = 0.3, p=0.2).

Lessons learned: Deferring HAART during intensive phase of treatment of TB does not compromise the immune status of the patient as demonstrated by improving CD4 counts. TLC is not useful as a surrogate marker of CD4 count in monitoring immunodeficiency in HIV/TB co-infected patients.

Next steps: We recommend further prospective studies comparing long term survival between patients starting HAART during and after the intensive phase of TB therapy in a resource constraint setting.

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MOPE0140
Outcomes of early versus late initiation of antiretroviral therapy in HIV-positive patients co-infected with tuberculosis in Southwestern, Uganda
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Background: There is still scanty evidence showing the optimal time to initiate ART in HIV infected patients with active tuberculosis (TB).

Methods: This was a prospective observational study in which eligible HIV+ patients with new APB+ TB were randomly started on ART within 2 weeks (early) or months (late) of starting TB therapy and followed for 8 months at Mbarara hospital, Uganda. The primary outcomes were: CD4 response, mortality and loss to follow-up (LTFU).

Results: We enrolled 189 patients (early: 95 and late: 94). Sixty-six per cent were male and the median age was 35 years (IQR: 28-39 years). Most patients were in WHO stages 3 and 4 (early: 85% vs late: 81%) and the mean CD4+ count was 173.6 cells/mm³ (SD: 159.3). Overall, 53% (101/189) completed the study, 10% (18/189) withdrew, 25% (47/189) were LTFU, and 12% (23/189) died. Of those who completed, 81% were cured of TB, 16% defaulted, 2% had relapses and 1% had treatment failure.

The mean CD4 increase was (early: 105.4 cells/mm³ (SD: 126.2) vs late: 76.1 cells/mm³ (SD: 97.2) and the mean CD4+ count was 173.6 cells/mm³ (SD: 159.3). Overall, 53% (101/189) completed the study, 10% (18/189) withdrew, 25% (47/189) were LTFU, and 12% (23/189) died. Of those who completed, 81% were cured of TB, 16% defaulted, 2% had relapses and 1% had treatment failure.

Lessons learned: Early ART treatment was associated with better retention in care but no difference was seen with CD4 responses and mortality in the two arms. Further decentralization of ART to lower health facilities was recommended.

Conclusions: Early ARV treatment was associated with better retention in care but no difference was seen with CD4 responses and mortality in the two arms. Further decentralization of ART to lower health facilities was recommended.

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MOPE0141

Incidence of tuberculosis and early mortality in HIV infected patients initiating antiretroviral therapy in Zewditu Memorial Hospital, Ethiopia

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Background: Among adults on antiretroviral treatment we determine the proportion of deaths that occur after ART initiation, establish tuberculosis incidence and death, and identify risk factors that may be associated with mortality.

Methods: A cross-sectional study set at the TB/HIV clinic in Zewditu Hospital, Ethiopia. Participants were screened for HIV at baseline and monitored monthly.

Results: A total of 4626 individuals, 1781 (41.7%) men and 2485 (58.3%) women whose median age and CD4 cell count were 35 years and 115 cells/µl respectively were included in the study between Sep. 2005 and Oct. 2009. At baseline 6.4 and 82.5% had WHO stage 3 and 4 respectively and 25.8% had CD4 below 200cells/µl respectively. There were a total of 291(6.8%) death, among which 17% died within 90 days of starting ART. The overall incidence rate of death were 2.8/100-person year (95% confidence interval (CI): 1.0-4.6). Risk of death was calculated after adjusting for CD4 T cell count, age, sex, WHO staging. Individuals at WHO stage 4 (adjusted hazard ratio (AHR) 1.967; p=0.005) were more likely to die. Male sex (AHR 1.450; p=0.001), age (AHR 2.037; p=0.001) ages between 25-34 years (AHR 2.260; p=0.001) and 35-44 years (AHR 2.070; p=0.003) were independent determinants of tuberculosis infection. Through the first 3 years after ART initiation 121(9.3%) transferred out and 580 (13.8%) lost to follow up. Mortality rate was 2.8/100 person-year (95% CI 1.9-5.5) of observation. 346(8.2%) patients on ART developed tuberculosis and the median time required to develop tuberculosis after ART initiation was 13(IQR 121(90.3%) transferred out and 580(13.8%) lost to follow up. Among 58 patients starting ART, 10 (17%) were diagnosed with incident TB (mean age-33 years, 66% F) at an average of 38 days after ART initiation. TB diagnoses included pulmonary (n=8), intestinal (n=1) and disseminated (n=1); 10 Incident TB cases and controls did not differ at baseline regarding age, CD4 (36 vs. 39 cells/mm³, p=0.7), HIV-RNA (350,993 vs. 337,788 copies/ml, p=0.8), ESR (63 vs. 59 mm/hr, p=0.8) or BMI (16.4 vs. 18.1, p=0.2). However, Hgb was lower at baseline in the TB group compared to controls (9.3 vs. 11.6 g/dl, p=0.005). At week 4, CD4 (48 vs. 91 cells/ µm ³, p= 0.04) and Hgb (7.6 vs. 11.0 g/dl, p< 0.0001) were lower while ESR was higher (104 vs. 73 mm/hr, p=0.007). At week 8, Hgb and HIV-RNA were significantly different at week 8 (Hgb of 8.6 vs. 11.2, p=0.003; and Hb of 67,958 vs. 5,522, p=0.04) in TB vs. controls, respectively.

Conclusions: Incident TB-associated death is high among patients initiating ART with CD4 < 100 cells/mm³ in rural kenya. Strategies that target baseline/pre-ART TB screening and close monitoring of patients with anemia and slow CD4 recovery early post-ART are important in identifying incident TB-associated death.

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MOPE0142

TB in HIV infected and uninfected children and adults: effect of sputum quality on microbiologic diagnosis of tuberculosis among patients in Northern Tanzania

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Background: Sputum smear positivity is important in managing these patients.

Methods: Prospective, observational, cohort study of HIV-1 infected patients with CD4 ≤ 100 cells/mm³ who initiated Ministry of Health recommended ART. Among 58 patients starting ART, 10 (17%) were diagnosed with incident TB (mean age=33 years, 66% F) at an average of 38 days after ART initiation. TB diagnoses included pulmonary (n=8), intestinal (n=1) and disseminated (n=1); 10 Incident TB cases and controls did not differ at baseline regarding age, CD4 (36 vs. 39 cells/mm³, p=0.7), HIV-RNA (350,993 vs. 337,788 copies/ml, p=0.8), ESR (63 vs. 59 mm/hr, p=0.8) or BMI (16.4 vs. 18.1, p=0.2). However, Hgb was lower at baseline in the TB group compared to controls (9.3 vs. 11.6 g/dl, p=0.005). At week 4, CD4 (48 vs. 91 cells/ µm ³, p= 0.04) and Hgb (7.6 vs. 11.0 g/dl, p< 0.0001) were lower while ESR was higher (104 vs. 73 mm/hr, p=0.007). At week 8, Hgb and HIV-RNA were significantly different at week 8 (Hgb of 8.6 vs. 11.2, p=0.003; and Hb of 67,958 vs. 5,522, p=0.04) in TB vs. controls, respectively.

Conclusions: Incident TB-associated death is high among patients initiating ART with CD4 < 100 cells/mm³ in rural kenya. Strategies that target baseline/pre-ART TB screening and close monitoring of patients with anemia and slow CD4 recovery early post-ART are important in identifying incident TB-associated death.

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MOPE0143

MOPE0143

Incident tuberculosis after initiation of antiretroviral therapy in rural Kericho, Kenya

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Methods: Retrospective study was conducted to describe the details and causes of death among TB/HIV co-infected patients. Patients who registered and started TB treatment at Chiangrai Prachanukroh Hospital between 2005 and 2008 and died during their TB treatment were included in the study. Basic information such as socio-demographics, underline diseases, TB related information, CD4 status, ART situation was collected from TB surveillance database and medical records. The causes of death were reviewed from medical records and government's registry, and classified into four categories as "TB-related", "HIV-related", "other causes" and "undefined" for the analysis.

Results: The total of 338 cases (female:115, 34.0%) were analyzed. Out of 213 cases with CD4 data within six months of TB treatment start, 68.5% were above 100 cells/ul. 63.9% of the total never receive ART throughout their TB treatment. Among the group who knew their HIV-positive status over one year ago, 44.2% didn’t receive ART at the time of TB treatment start. 28.1% of the total death were categorized as TB-related, 26.9% HIV-related, 20.4% others and 24.6% undefined. There was no gender difference on the cause of death. 54% of the total died within two weeks after TB treatment start. Among 28.1% of TB-related death, the percentage within two month was significantly higher than the group of other causes (p= 0.001). Conclusions: TB-related and HIV-related showed almost equal percentage of the cause of death; however, we could not determine the cause for 24.6% because of limited information. 36.9% of the total didn’t have any CD4 data within six months of TB treatment start, which may have affected on ART delay and death.

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MOPE0145

Outcomes of non-nucleoside reverse transcriptase inhibitor (NNRTI)- and protease inhibitor (PI)-based antiretroviral therapy (ART) regimens among HIV-infected children co-infected with rifampicin at the Botswana-Baylor Children’s Clinical Centre of Excellence (BBCCCOE)

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Background: Circulating levels of NNRTIs and PIs may be reduced by co-administration of rifampicin, a key anti-tuberculosis therapy (ATT) component. WHO recommends NNRTI-based regimens as first-line pediatric ART and PI-based regimens for children failing first-line. Limited data exist regarding efficacy and toxicity of NNRTI- and PI-based regimens among HIV-infected children receiving rifampicin. Botswana HIV/AIDS National Pediatric Guidelines recommend continuation of NVP or Efavirenz on NNRTI-based regimens who develop active TB infection; no NNRTI dose adjustment when first-line ART is initiated in patients on ATT; and, doubling of LPV/r dose when taken with rifampicin. Clinical, virological and toxicity outcomes for a cohort of HIV/TB co-infected children administered rifampicin with NVP, Efavirenz or LPV/r are of interest.

Methods: Retrospective chart review. Inclusion criteria-age <19y, HIV-infected, on concomitantly-administered NNRTI- or PI-based ART plus rifampicin-containing ATT between February 2008-July 2009 at BBCCCOE. Data collected-aged, to ART, clinical and virological outcomes (new OIs, poor growth, VL at end of ATT), drugs used and hepatotoxicity (ALT/AST/AST/TP) were collected.

Results: 65 patients received ART/ATT, including 5 (7.6%) MDR-TB patients excluded from the analysis. 36 (56.2%) received NVP, 35 (53.1%) LPV/r and 28.3% (17/60) LPV/r. Mean age 8.4 years (range 6 months-19 years). 23 males, 37 females. No deaths registered. All patients completed ATT. No clinical outcome differences between groups. Virologically, 3 patients had detectable VL (>400) at completion of ATT-2 FPAV group, 1 NVP group; all with noted poor adherence. 3 patients developed hepatotoxicity-1 from NVP group, 2 from LPV/r group; none required discontinuation for toxicity.

Conclusions: Although limited by small sample size, in this cohort no substantial differences in clinical and virological outcomes were noted between HIV/TB patients receiving rifampicin with either NVP or PI-based ART. Optimal virological response (detectable VL) was only seen in patients noted non-adherence to ATT. Hepatotoxicity (subclinical) was a common event.

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MOPE0146

HIV patients on antiretroviral treatment diagnosed with smear positive tuberculosis and smear negative/extra-pulmonary have similar mortality rates

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Background: Before HIV, patients with smear positive tuberculosis (TB) had higher mortality rates compared to ones with smear negative and extra-pulmonary. After HIV, the out break of smear negative and extra-pulmonary TB (EB-TB) patients had higher mortality rates as compared to smear positive. However, the effect of antiretroviral therapy (ART) on mortality in this group of patients is unknown. The aim of this study was to investigate mortality rates stratified by smear-status among patients who were diagnosed with TB while on ART at Infectious Diseases Institute (IDI) Kampala.

Methods: This was a retrospective cohort study of patients who attended the IDI clinic from January 2004 to February 2006. The primary endpoint of the study was mortality while on treatment for TB. We compared incidence rates.

Results: 883 patients were identified, 283 were not on ART, 424 were not on ART at the time of TB diagnosis and I hadn’t had sputum done. Of the remaining 158 patients, 51.3% were female, median age (IQR) 36[31-42], CD4-count 119.6[218.5]. 29 (18.4%) patients positive smear PTB, 50 (31.6%) EPTB and 70 (50%) smear negative TB. 39 (24.7%) were initiated on nelfinavir, 25 (28.3%) LPV/r. Mortality rates were similar among smear positive TB (0.6 per 1,000 PYAR) and smear negative TB (0.9 per 1,000 PYAR) (p-value=0.22).

Conclusions: Contrarily to the pre-ART era, HIV-positive patients diagnosed with smear negative/extra-pulmonary TB while on antiretroviral treatment, are not at higher risk of dying as compared to patients with smear positive TB.

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MOPE0147

Provider initiated HIV testing and counseling among TB patients: lessons learned at Martin Preuss Centre of Bwalia Hospital in Lilongwe, Malawi

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Background: The TB burden in Malawi is high. 27,000 patients register for TB treatment annually, and 70% of TB patients are HIV-infected. In December 2006, the Lilongwe district health office, the Malawi National TB control programme and the Lighthouse Trust started integrated TB/HIV services under one roof at the Martin Preuss Centre (MPC) with implementation of provider-initiated HIV testing and counseling (PTC), combined TB/antiretroviral treatment (ART) services among patients.

Methods: After TB diagnosis and before collecting TB treatment, TB officers refer all patients to the PTC room next door, where lay counselors ascertain individual HTC and ART history and provide HTC using standard registers and whole blood rapid tests, if required. TB patients with no interest in HTC opted out at this point. HIV-positive TB patients receive CPT and TB treatment and are started on ART.

Results: Between December 2006 and October 2009, 7455 patients were diagnosed with TB, and 6857 (92%) accepted referral to the PTC-room, but 1491 (22%) already knew their HIV status because they were tested within the last 3 months. Of the remaining 5366 TB patients who were newly tested, 7756 (70%) were HIV-infected. The annual ascertainment of HIV status in TB patients increased from 52% in 2007 to 94% in 2009. As of October 2009, 5592 (69%) of newly diagnosed TB/HIV co-infected patients started on ART at MPC.

Conclusions: Integration of PTC in the TB registration process and linkage to ART under one roof has increased the ascertainment of HIV status and ART uptake among TB patients and can be recommended to other clinics in Malawi.

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MOPE0148

Incidence and treatment outcomes of patients re-treated for tuberculosis at Malawi’s largest tuberculosis clinic

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Background: About 35% of all re-treatment tuberculosis (TB) cases in Africa are recurrent smear-negative pulmonary TB or extra-pulmonary TB (This group is called “other disease” TB category). Though “other disease” TB category constitute a sizeable proportion of re-treatment TB cases, there is little information available.

Methods: A retrospective cohort study was conducted based on routine program data from the Martin Preuss Centre, the largest TB registry in Malawi, from December 2006 and December 2008. We identified the “other disease” TB cases from the TB registry database.

Results: Of the total, 1,317 re-treatment TB cases (39% females) regis-tered at MPC, 883 (66%) were registered as ‘other disease’ category. The annual incidence of “other disease” TB cases was 70 per 100,000 re-treatment TB cases in 2006, 63 in 2007 and 73 in 2008. A total of 695 (79%) had smear-negative pulmonary TB. Treatment outcome information was not available in 19 cases of the “other disease” TB cases. Of the remaining 866, 767 (89%) were completed, 66 (7.8%) were transferred out and 5 (0.6%) failed on treatment. In multivariable analysis, treatment success (completed treatment) among the “other disease” TB cases was associ-ated with being female (Odd ratio (OR) 1.70, 95% Confidence Interval 1.12 - 2.61) and older age greater than 70 years (OR 0.35 CI 0.14 - 0.90).

Conclusions: Patients with “other disease” TB have acceptable treatment outcomes. Efforts should be taken in managing elderly patients and targeting male patients to improve success rate of TB treatment.

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MOPE0149

Factors associated with mortality among tuberculosis patients started on antiretroviral therapy (ART) at the largest TB registry in Lilongwe, Malawi

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Background: Predictors of and mortality patterns in tuberculosis (TB) patients starting antiretroviral therapy (ART) in resource poor contexts are poorly understood. It is crucial to understand these factors and patterns to reduce excess mortality. The study, therefore, assesses mortality and identifies factors associated with mortality among TB patients starting ART at Martin Preuss Centre (MPC) clinic in Malawi.
Methods: Data from HIV infected TB patients registered at MPC between December 2007 and August 2009 was analysed using Poisson regression models. Mortality during 3 months period was determined and risk factors examined.

Results: A total of 1,108 patients were included into the study with a median age of 48 years. Estimated mortality at 3 months, 6 months and 9 months were 10.3%, 15.3% and 18.2%, respectively. In multivariable analysis, factors associated with mortality were sex (male, hazard ratio (HR) 1.74 95% Confidence Interval (CI) 1.29 - 2.38) and body mass index (BMI) (HR 3.45 95% CI 1.18 - 8.65). A linear trend in mortality was observed with increasing levels of malnutrition (X2 for trends = 17, p < 0.001).

Conclusions: TB HIV infected men are at higher risk of dying than women. Lack of support contribute to high risk of death in TB HIV infected patients. Giving supplementary food to the co infected patients will therefore help reduce excess mortality.

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MOPEO150

Immunosuppression level at AIDS and disseminated tuberculosis disease in São Paulo State, Brazil

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Background: Brazil is among countries with a large number of tuberculosis cases, as well as AIDS cases. Although the impact of HIV on tuberculosis mortality rates has decreased dramatically after the introduction of HAART (Highly Active Anti-retroviral Therapy), tuberculosis remains one of the leading causes of death among people living with HIV/AIDS. The aim of the present study is to describe the level of immunosuppression at the time of diagnosis of disseminated tuberculosis in São Paulo State, Brazil.

Methods: HIV/AIDS and disseminated tuberculosis, extra-pulmonary, without cavitations (DTB) during the years 2007-2008 in São Paulo State-Brazil were selected at Notifiable Diseases Information System (SINAN). Results were linked to Control System for Laboratory Tests (SISCIEL) database and the CD4 count cells collected closest to DTB diagnosis was obtained. Patients with other opportunistic infection at notification form were excluded. Age, gender and AIDS risk exposure factor informations were also collected.

Results: Six hundred and fifty-four patients were diagnosed with AIDS and DTB in 2007-2008. One hundred and forty-eight patients with other AIDS-defining conditions on notification form were excluded. Two hundred and sixty-eight patients had corresponding CD4 count in SISCIEL; 62.3% had CD4 count < 200 cells/mm² and 17.5% had CD4 count > 350 cells/mm² at time of DTB diagnosis. Two hundred and seven patients (77.2%) were male and sixty-one female (22.8%). The mean age was 40 years-old for male and 41 years-old for female. The most frequent AIDS risk factor reported for DTB was heterosexual transmission.

Conclusions: The majority of DTB patients presented low CD4 count at time of diagnosis. However, patients without severe immunosuppression were also found. The early detection of HIV infection may prevent the development of disseminated tuberculosis, with introduction of HAART and IPT (Isoniazid Preventive Therapy).

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MOPEO151

HIV-TB and non-TB/HIV among PLHAs with respect to CD4 count and mortality analysis at ART centre, B. J. Medical College, Civil Hospital, Ahmedabad

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Background: There exists a very strong correlation between TB and HIV. The dual incidence of HIV and TB increases the risk of mortality among the PLHAs. Study was done to know the mortality rate in HIV-TB co-infected patient and Non TB HIV patients.

Methods: ART initiated patients during period of May 2005 to December 2009 comprised our study population.

Results: Total 6077 PLHAs were analysed for HIV-TB and Non TB HIV infection. Males accounted for 74.20% in HIV TB group and 64.20% in Non TB HIV group. Extra Pulmonary TB (62.8%) cases are dominant.

CD4 Count HIV-TB Co-infection Mortality/Total Cases = 388/2065 (18.8%) Non TB HIV Mortality/Total Cases = 450/4012 (11.2%)

≤50 111/388 107/450
50 - 150 372/388 169/450
151 - 250 63/388 104/450
>250 42/388 79/450

Duration of Mortality Number (%) N=388 Number (%) N=450
3 - 6 Months 94 (24.2) 139 (29.5)
1 - 6 Months 166 (42.8) 156 (34.7)
6 - 12 Months 57 (14.7) 55 (12.2)
12+ Months 71 (18.3) 100 (22.2)

[Duration of Mortality in Tuberculosis]

Conclusions: HIV TB dual infection was observed almost in the half of the PLHAs. With respect to last CD4 count < 50; Deaths among HIV-TB is higher (98.6%) compared to Non TB HIV (23.77%). There is no much difference between age group of HIV-TB and Non TB HIV infected patients. High Mortality was observed within 6 months of the group ART initiation. Patients diagnosed with AIDS and disseminated tuberculosis suggested ART initiation after 2 months of ART, now it is to initiate ART after 15 days of ART initiation. Early diagnosis and management of the dual course of infection improves the survival of the patients.

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MOPEO152

A tuberculosis infection control assessment and monitoring tool: its’ application in high HIV-burdened public health sector facilities in Gauteng, South Africa


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Background: The HIV epidemic in South Africa has resulted in excessive tuberculosis cases, which have overwhelmed the DOTS-directed, National TB Control Programme. Consequently, TB preventive efforts are receiving renewed attention. Implementation of TB infection control guidelines is hampered by the lack of existing assessment tools. We present a novel TB Infection Control Assessment and Monitoring Tool and describe its application in public health care facilities in Johannesburg, South Africa.

Methods: The tool comprises four categories (Supporting structures, Administrative, Environmental and Personal risk reduction) in which the presence of interventions based on WHO Guidelines for TB Infection Control in Low Resource Settings and South Africa Infection Control Guidelines are assessed. Criteria include low or no-cost interventions: the presence of a TB infection control committee; a TB infection control plan; TB infection control training; health talks; screening and triaging of coupling patients; open windows and directional airflow and screening of staff for TB. Scores of zero, one or two points are allocated, and totals for each category are assessed. The tool can provide baseline and ongoing assessments indicating need for initial interventions and ongoing quality improvement.

Results: The tool was applied at 38 facilities or units within facilities (14 primary health care facilities, 2 antiretroviral clinics, 11 outpatient clinics and 11 inpatient facilities within secondary level care hospitals). Mean scores are presented below.

Category (Maximum score) Primary Health Care (n=14) Facilities Antiretroviral clinics (n=11) Outpatient clinics (n=2) In-patient Units (n=32) Total score (64)
Supporting structures (18) (6-48) (6-48) (2-11) 3 (2-4) 24 (15-36)
Administrative controls (18) (9-51) (9-51) (3-10) (5-14) 12 (6-27)
Environmental controls (12) (7-12) (7-12) (1-6) (1-6) 12 (6-27)
Personal risk reduction (14) (3-10) (5-10) (1-6) (0-2) 13 (9-19)
Total score (64) 24 (15-36) 12 (6-27) 12 (6-27) 13 (9-19)

(Results from TB Infection control assessment tool.)

Conclusions: This tool provided baseline information regarding the local application of TB infection control measures, and identified the need for concerted application of TB infection control interventions.

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MOPEO153

TB/HIV-related knowledge and attitudes of civil society organizations in Ogun state, Nigeria

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Issues: Due to increasing global recognition of interrelationships between HIV and Tuberculosis, there is the need for assessing the level of TB-related knowledge of civil society organizations (CSOs) working on HIV in order to determine how well positioned they are to respond to the twin epidemics of TB and HIV.

The Positive Life Association of Nigeria (PLAN) conducted a survey among CSOs working on HIV/AIDS in Ogun State, Nigeria in January 2010 on their knowledge about TB and HIV/AIDS.

Description: PLAN administered a questionnaire designed to test the knowledge of representatives of 19 CSOs in Ogun State on TB prevention, diagnosis, infection and treatment including relationships between TB and HIV. All the respondents have attained either secondary or tertiary education. 33% are female and 67% male. 42% 5%; 26% and 26% of the survey respondents were people with HIV, healthcare workers, caregivers and community members respectively. Respondents’ ages range from 25 to 50 years. About 50% of the respondents are in the 25 - 40 age range.

Lessons learned: Although all respondents reported TB as airborne disease, 52% of the respondents do not know mannouch test as a TB skin test. 42% of the respondents could not differentiate between latent and active TB. 4 of 5 respondents do not recognize direct therapy as WHO-recommended strategy of TB treatment. 10% of respondents know anti-TB drugs while about 58% claimed that TB can be found only in the lungs and that it causes HIV infection.
Other bacterial infections and malaria and parasitic infections

MOPE0154
Polymerase-chain reaction analysis for a rapid diagnosis of pulmonary tuberculosis in bronchoalveolar lavage fluids

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Background: The rapid diagnosis and appropriate treatment of pulmonary tuberculosis (PTB) is important. We assessed the diagnostic usefulness of polymerase-chain reaction (PCR) analysis for detection of Mycobacterium tuberculosis (MTB) in bronchoalveolar lavage (BAL) fluids.

Methods: We retrospectively reviewed 195 patients performed PCR analysis for MTB in BAL fluids from January 2009 to December 2009. The diagnostic accuracy of BAL PCR for MTB was evaluated. Sensitivity and specificity of diagnosis tested, and BAL culture as a gold standard.

Results: Seventy-five of 195 patients were MTB culture positive from the BAL specimens. PCR analysis in BAL fluids for detection of MTB had sensitivity of 96%, specificity of 62.5%, positive predictive value of 61.5%, and negative predictive value of 96.2%. Thirty of the 75 BAL culture positive samples were AFB positive and 45 were negative. BAL AFB smear for MTB had sensitivity of 40. Thirty of 75 culture-positive patients could produce adequate sputum for evaluation. Only 6 (9%) of these 30 patients were culture-positive for MTB in their sputum.

Conclusions: PCR analysis using BAL fluids revealed high positive rates of MTB. Therefore, PCR analysis in BAL fluids is an important and rapid diagnostic tool in diagnosing PTB, especially in patients who cannot produce adequate sputum.

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MOPE0156
Burden of malaria in HIV-positive pregnant women in Ibadan, Southwest Nigeria: a preliminary report

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Background: Pregnancy and HIV infection individually increase susceptibility to malaria. This gives the HIV-positive pregnant woman a double burden. Malaria transmission is intense and occurs all year round in southwest Nigeria.

Methods: We evaluated the prevalence of malaria parasitemia by expert microscopy of Geimsa stained thick blood smear among HIV-positive (+ve) women at the PEPFAR clinic and HIV-negative (-ve) women at the antenatal clinic at both clinics located at the University College Hospital Ibadan in southwest Nigeria between July 2009 and January 2010.

Results: The prevalence of malaria parasitemia was 18.8% (24/128) among HIV +ve women and 5.9% (24/406) HIV -ve women (p = 0.001, OR 3.873, 95% CI 2.004 - 6.732). The geometric parasite density was higher among HIV +ve women but this was not significant. Mean hemoglobin was significantly lower among HIV +ve women compared with their normal counterpart (10.37 ± 4.11 versus 13.45 ± 3.76; p = 0.001; f-statistics 107.129).

The use of opportunistic infection chemoprophylaxis (TMP/SMX) with or without cotrimoxazole (SMZ/TMP) did not significantly influence the prevalence of malaria parasitemia. HIV -ve women boked significantly earlier than the HIV +ve women. The HIV -ve women received the chemoprophylaxis between 18.71 week versus 19.44 ± 7.64 weeks; p = 0.029; f-statistics 4.834). All socio-economic indicators (level of education of the women and their spouses, occupation of the women and their spouses, type of toilet accommodation, type of toilet facility, type of portable water and ownership of various garpetts) were insignificantly (p < 0.001) lower among HIV +ve women.

Conclusions: Malaria exerts significant burden on HIV-positive women in southwest Nigeria. These findings underscore the need for stronger scheduling of IPTp as well as other malaria control efforts (ITN, IRS and prompt case management) specifically targeted at HIV+ve women.

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MOPE0157
Evaluation of a screening programme on imported Chagas’ Disease (CD) in an HIV unit in Madrid, Spain

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Background: Imported Chagas disease (CD) is an emerging disease in Spain. Reactivation of latent infection may occur in HIV-patients. Our objective is to evaluate the implementation of a CD screening programme in an HIV Unit.

Methods: Serological screening of CD was performed using immunochromatography (ICT) of Trypanosoma cruzi in all HIV-positive patients from endemic areas who agree to participate. ELISA, IIF and PCR were done if ICT was positive. Factors relating to positivity were analysed using Fisher’s exact test or Student-t-test as appropriate. All p values < 0.05 were considered as significant.

Results: 149 patients were included: 76.5% males; median age 35.9 years (18-60); HIV transmission: heterosexual 50%, homo/bisexual 49%. HIV diagnosis had been done in Spain in 88%; 17.5% had CDC stage at first visit, 85% had a B HIV-1 subtype. Median length of stay in Spain: 82.7 months (3-411). Previous knowledge about CD: 26.2%, knowledge of the vector: 20%; had seen vectors at home: 6.7%.

T.cruzi ICT was positive in 4 cases, and confirmed (by ELISA and IIF) in 2 (3%); PCR was positive in 1; that patient was pregnant and a follow-up of the newborn was done to rule out vertical transmission.

Factors associated with confirmed positive T.cruzi serology: Bolivian or Argentinian origin (p=0.0021), coming from rural areas (p=0.027), previously living in an adobe-made (p=0.0055) or thatch-roofed house (p=0.0006), previous knowledge of CD (p=0.02), education level of seeing vectors in the home (p=0.013). Neither age, gender, eosinophilia, elevation IgG, HIV-1 subtyping, level of education, CDC stage, CD4 nadir, HIV basal viral load or length of stay in Spain were associated with a positive T.cruzi serology.

Conclusions: Units caring for HIV patients from CD endemic areas should implement CD screening protocols. Some simple questions during the interrogation, if systematically performed, could predict a positive serology in those patients.

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Two additional cases of filariasis (1 dual parasitological exam of stool was positive in 26/204 (12.7%): 2 serology was positive in 0.9%. 

0.0001). Phoid were on ART and co-trimoxazole prophylaxis. Among the 84 CSOs, non-typhoid E. coli was isolated in 12/180 (6.7%); 2 S. aureus (n=2), 2 Salmonella spp. (n =3), 2 Trichomonas vaginalis, 1 Strongyloides stercoralis. Two additional cases of Giardia were diagnosed using antigen assay. There was 1 case of nonsyphilitic, 1 case of Plasmodium falciparum malaria and 2 filarisis (1 dual parasitological exam of stool was positive in 26/204 (12.7%): 2 serology was positive in 0.9%). Parasitological exam of stool was positive in 26/204 (12.7%); 2 Ascaris lumbricoides, 12 Blastocystis hominis, 1 Cryptosporidium, 5 Entamoeba histolytica, 6 Trichomonas vaginalis, 2 Trichuris trichura, 1 Strongyloides stercoralis. 

Between July 2007-December 2009, 1323 bacteremic episodes were recorded. Blood cultures were systematically performed in all patients suspected of bacteremia. Clinical information was retrieved from the Antibiotics Resistance in Cambodia database. Bacteria were considered as separate episodes if they occurred at least 2 weeks apart. Identification and resistance typing was performed with Micronav panels (Siemens Diagnostics).

Results: Between July 2007-December 2009, 1323 bacteremic episodes were recorded. Blood cultures grew clinically significant organisms (CSO) in 84 (6.3%) episodes from 62 patients (mean age: 36 years) ranging from 17-77 years. CSO were isolated in 10 (60.6%) episodes respectively. Patients were on ART and co-trimoxazole prophylaxis. Among the 84 CSO, non-typhoid E. coli was isolated in 12/180 (6.7%); 2 S. aureus (n=2), 2 Salmonella spp. (n =3), Streptococcus pneumoniae (n=3), Cryptococcus neoformans (n=2), Salmonella typhi, other Streptococcus and Moraxella Catarrhalis (n=1 each). Salmonella spp. displayed high levels of resistance to amoxicillin (29/34, 85%), and ceftriaxone (31/33, 93.9% and 32/94, 94.1% respectively). Escherichia coli showed high resistance rates to ceftriaxone and ciprofloxacin (10/14, 71.4%) as well as combined resistance to all first line beta-lactam antibiotics (amoxicillin, ceftriaxone, ciprofloxacin and cefixim) in 6 of 14 isolates (42.8%). Methylillin resistant S. aureus(MRSA) was identified in 4 of 32 S. aureus. Multidrug resistance occurred in seven patients, due to non-typhoid Salmonella spp. Overall mortality was 20.2% (17/84 bacteremic episodes).

Conclusion: Bacteremia in Cambodian HIV-infected adults is predominantly caused by Gram-negative bacilli, mainly Salmonella spp. with frequent resistance rates of 94% for ceftriaxone and 94% for ciprofloxacin.
CD4 count of co-infected patients was 116(range 15-354)/μL. All co-infected respondents were referred to correct Amphotericin B and were put on appropriate therapy. No secondary VL patients with co-infected individuals had parasitologically proven relapse in the first year (5 had one relapse). Of these, three occasion after treatment which were re-treated with Amphotericin B in all but one. Till the end of 2008, five were alive and on ART, five had expired and three were lost to follow-up.

Conclusions: Recurrent symptoms VL disease is common particularly in the first year without secondary anti-leishmanial prophylaxis despite ART. Mortality of HIV+VL patients is also very high. Recurrent VL in HIV-infected individual should be considered as AIDS defining illness and secondary prophylaxis should be employed in all.

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Hepatitis co-infections: (including HBV, HCV)

MOPE0163-MOPE0179

Five year review of HIV-infected patients co-infected with Hepatitis B Virus in two urban clinics in New York, USA

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Background: Co-infection with Hepatitis B virus (HBV) is not uncommon and can lead to increased liver-related morbidity and mortality. We review treatment experience of co-infected patients in our center.

Methods: A retrospective chart review of 4721 HIV-infected patients followed at the Center for Comprehensive Care in St. Luke’s Roosevelt Medical Center, New York, from 11/1/2005 to 12/31/08. 218 patients were identified to have co-infection with HBV by positive HBV surface antigen (HBsAg). We analyzed demographic data, laboratory data, abdominal imaging, liver biopsies, anti-HBV medications, and documented treatment outcomes.

Results: Our HIV-HBV co-infection rate was 218/4721 or 4.62%. 33/4721 patients (0.70%) had a triple infection (HIV-HBV-HCV). The HIV-HBV cohort’s demographic data, laboratory data, abdominal imaging, liver biopsies, anti-HBV medications, and documented treatment outcomes.

Conclusions: Treatment of HBV in HIV-infected patients appears to be important in order to minimize liver-related morbidity and mortality.

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Review of hepatitis B surface antibody 12 months and successful double dose hepatitis B vaccination in HIV-infected patients

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Background: Decreased hepatitis B virus (HBV) vaccine immunogenicity has been observed in HIV-infected patients. Double dose (DD) HBV vaccination can achieve higher immunogenicity rates. Limited data exist of how long hepatitis B surface antibody (HBsAb) remains detectable after successful DD HBV vaccination.

Methods: 48 HIV-infected patients, followed in our Center for Comprehensive Care, St-Luke’s Roosevelt Hospital, New York, received DD HBV vaccination after they did not respond to conventional vaccination. Double dose vaccination consisted of 20μg/mL Recombivax HB® (Merck & CO, INC, Whitehouse Station, New Jersey, USA) that was injected in each deltoid (for a total of 40μg) at 2-4 month intervals. 24 patients had HBsAb determination one year after successful DD HBV vaccination.

Results: Historically our HIV vaccine response rate to conventional series in our patients was 35%. 48 patients completed the DO vaccine series and the response rate -positive HBsAb- was 40/48, 83%. The characteristics of the responding and non-responding cohort were: Men 77%, White 43%, Hispanics 58%, Blacks 27%, Caucasian 15%; HIV risk factors: MSM 63%, Heterosexual 29%, IDU 4%; Median CD4 + T cell count: 461, mean HIV viral load log2, 2.22 19% also were HCV positive, and 92% were receiving antiretroviral therapy (4/20/04-04/05). All patients had HBsAb responders measured their antibody titers. The mean titers were 100000 at 2 weeks and 4 weeks after the second dose of the vaccine. The mean titer was 100000 at 2 weeks and 4 weeks after the second dose of the vaccine. The mean titer was 100000 at 2 weeks and 4 weeks after the second dose of the vaccine.

Conclusions: DD HBV vaccine achieved a high immunogenicity rate, 83%, in our HIV-positive patients. However, 46% of our vaccine responders, despite being on antiretroviral therapy, were non-responders. Double dose HBV vaccination, after one year. Larger trials are needed to assess DD HBV vaccine in setting of HIV infection.

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Interferon alpha therapy dramatically alters thyromysiosis through inhibition of IL-7 secretion in both HCV and HIV-HCV co-infected patients

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Background: The combination of Interferon alpha (IFNα) and Ribavirin is presently the only approved therapy for chronic hepatitis C. This therapy allows viral eradication in about 50-80% of IFNα-treated patients. However, despite its antiviral efficiency, this treatment induces severe lymphopenia that, in some cases of HCV co-infected patients, may lead to premature treatment interruption.

Methods: We here analyzed the consequences of IFNα therapy on both thymic function and peripheral T-cell homeostasis in both HCV and HIV-HCV co-infected patients initiating IFNα/Ribavirin therapy.

Results: As early as one month following IFNα initiation, a profound decrease in circulating cell numbers was observed for all T-cell subsets, including naive T-cells and recent thymic emigrants. Surprisingly, IL-7 plasma concentration, initially elevated in HIV-infected patients, rapidly dropped while lymphopenia progressed. Measurement of both cellular expression and plasma concentration of the IL-7 receptor alpha chain (CD127) demonstrated that the decreased IL-7 plasma concentration was neither a consequence of higher consumption of the cytokine nor due to its neutralization by soluble CD127. Finally, variation of IL-7 plasma concentration was correlated with that of viral load, of thyromysiosis and of recent thymic emigrant concentration in blood.

Conclusions: These data demonstrate for the first time the major negative impact of IFNα-based therapy on thyromysiosis and suggest a therapeutic potential of IL-7 for the maintenance of peripheral T-cell homeostasis in IFNα-treated patients.

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Progressive normalization of liver enzyme elevation during the first 30 months of ART in an HIV-positive patient cohort in Uganda

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Background: The risk of liver enzymes elevation caused by antiretroviral therapy (ART) described in the developed world is not well characterized in sub-Saharan Africa. We determined the frequency of liver enzyme elevation over 30 months following ART initiation among HIV-infected patients in Kampala, Uganda.

Methods: We analyzed data from cohort of patients started on ART between 04/04/04-05 at the Infectious Diseases Institute. Liver enzyme elevation was graded (1-4) according ACTG guidelines at baseline and 6 monthly for 30 months. Hepatitis B surface antigen (HBsAg) status was determined at baseline.

Results: Of 546/559 (97.7%) patients with complete baseline data, 377 (69%) were female, median age 35 years (IQR 30-41), median CD4+ cell count 97 cells/mL (IQR 20-164). 88.7% had WHO stages 3/4 disease. 74% were started on stavudine/lamivudine/nevirapine, 26% on zidovudine/lami

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Tuesday 20 July

Poster Exhibition

Author Index

Monday 19 July
Patient and physician barriers to HCV treatment in HIV-HCV coinfected individuals: results from ANRS CO13 HEPAVIH cohort

D. Salmon1,2, J. Cohen1, M. Winnock1, E. Pambrou1, V. Villetes1, 2, 4, 5, F. Lacombe6, C. Lacombe-Martin6, C. Duvivier7, M.-A. Lokko7, P. Sogni7, C. Catzamina7, F. Babes8, B. Spirit9, M.P. Carrieri10,4, 11, and the HEPAVIH Study Group

Background: While HCV treatment is a major therapeutic opportunity in HIV-HCV infected patients, it is still unknown to what extent patient beliefs and physician characteristics may influence HCV treatment initiation decisions. We used longitudinal data from HEPAVIH ANRS-CO13 to disentangle the effect of clinical, physician and patient related factors from the decision to start HCV treatment.

Methods: Among the 1040 patients enrolled in the cohort, only pegylated interferon and ribavirin naïve individuals were included. Patients with contra- indications to HCV treatment (decompensated cirrhosis, transplantation or hepatocellular carcinomas) were excluded. Medical data were retrieved from hospital medical card, self-administered questionnaire for patients and physicians and collected socio-demographic, psychosocial and behavioral data. Access to the model was defined as absence of pegylated interferon and ribavirin in the first three years after enrolment in the cohort. Logistic regression was used in order to study the influence of baseline characteristics on access to HCV treatment.

Results: The 600 patients included had a median [IQR] follow-up duration of 12 months (11-24) and 124 (20.7%) started HCV treatment within the first 3 years of the cohort follow-up. HCV treatment incidence was 15% per 100 person-years. After adjustment for age (OR[95%CI]) 0.67[0.48-0.96], having children (0.6[0.38-0.98]), years since HIV-positive test (0.62 [0.44-0.88]) and severe fibrosis (3.17[95%CI]: 9.15), negative beliefs about HCV treatment effect- iveness (0.6/0.39-1.00)) and having a primary physician not in- volved in health care (0.53[0.30-0.94]) were independent barriers to HCV treatment.

Conclusions: Access to HCV treatment is influenced not only by clinical characteristics but also by physicians’ experience and patients’ beliefs about treatment effectiveness and toxicity. Improved communication between patients and physicians about their degree of difficulty in HCV treatment benefits and the management of possible side-effects is a priority especially in patients facing the burden of a double chronic infection.

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Characteristics and prognosis of fibrosing cholestatic hepatitis after liver transplantation in HIV-HCV coinfected patients

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Poster Exhibition

Monday 19 July

Safety, efficacy and long-term outcome in HIV-infected patients with HCV-cirrhosis and hypersplenism after partial splenic embolization (PSE) and full-dose peg-IFN plus ribavirin

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Background: While HCV treatment is a major therapeutic opportunity in HIV-HCV infected patients, it is still unknown to what extent patient beliefs and physician characteristics may influence HCV treatment initiation decisions. We used longitudinal data from HEPAVIH ANRS-CO13 to disentangle the effect of clinical, physician and patient related factors from the decision to start HCV treatment.

Methods: Among the 1040 patients enrolled in the cohort, only pegylated interferon and ribavirin naïve individuals were included. Patients with contra- indications to HCV treatment (decompensated cirrhosis, transplantation or hepatocellular carcinomas) were excluded. Medical data were retrieved from hospital medical card, self-administered questionnaire for patients and physicians and collected socio-demographic, psychosocial and behavioral data. Access to the model was defined as absence of pegylated interferon and ribavirin in the first three years after enrolment in the cohort. Logistic regression was used in order to study the influence of baseline characteristics on access to HCV treatment.

Results: The 600 patients included had a median [IQR] follow-up duration of 12 months (11-24) and 124 (20.7%) started HCV treatment within the first 3 years of the cohort follow-up. HCV treatment incidence was 15% per 100 person-years. After adjustment for age (OR[95%CI]) 0.67[0.48-0.96], having children (0.6[0.38-0.98]), years since HIV-positive test (0.62 [0.44-0.88]) and severe fibrosis (3.17[95%CI]: 9.15), negative beliefs about HCV treatment effect- iveness (0.6/0.39-1.00)) and having a primary physician not in- volved in health care (0.53[0.30-0.94]) were independent barriers to HCV treatment.

Conclusions: Access to HCV treatment is influenced not only by clinical characteristics but also by physicians’ experience and patients’ beliefs about treatment effectiveness and toxicity. Improved communication between patients and physicians about their degree of difficulty in HCV treatment benefits and the management of possible side-effects is a priority especially in patients facing the burden of a double chronic infection.

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MOPE0171  
Hepatitis C prevalence in the adult HIV population at the Botswana-Baylor Children’s Clinical Centre of Excellence (BBCCCOE) in Gaborone, Botswana

R. Muga, A. Sanvisens, E. Martinez, D. Fuster, I. Serra, J. Tor, A. Muñoz

Background: Co-infection with HIV and hepatitis C virus (HCV) presents a dilemma in the resource-limited setting. Decisions to implement HCV-screening in an HIV-infected population largely rely on limited prevalence data and the availability of treatment options. Existing prevalence data shows great variation within Africa. While overall prevalence in Africa continent-wide has been estimated at between 5% and 9%, this reflects higher prevalence in North Africa, with rates in sub-Saharan Africa estimated at approximately 3.0% and lower, and between 1% and 2% in southern Africa. In Botswana, data is quite limited, with one published outpatient study reviewing 50 HIV-infected patients finding a 2% HCV prevalence. Routine HCV screening is not included in Botswana’s national HIV treatment protocols, nor is effective treatment for hepatitis C widely available in the country. The objective of this study was to add data to the HCV-HIV co-infection prevalence data available from Botswana.

Methods: Retrospective review of records for the active patient population at the Family Medical Clinic (FMC) at BBCCCOE, where patients ages 18-80 are treated for HIV infection and were systematically screened for a variety of comorbidities between 2005 and 2009, including HCV by HCV antibody testing (n=235).

Results: HCV prevalence in the population studied was 0.9% (2/235). No upward or downward trends from year-to-year were noted. No patients with HIV-HCV co-infection were found to be further co-infected with hepatitis B.

Conclusions: Our results support previously reported findings of low prevalence in Botswana and the southern African region. In the setting of low prevalence and lack of effective treatment options, routine screening for Hepatitis C in HIV-infected patients does not appear to be warranted in Botswana.

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MOPE0172  
Clinical and laboratory predictors of FIB-4 elevations in HCV mono-infected and HIV/HCV co-infected patients

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Background: Fibrosis staging by liver biopsy is uncommon in asymptomatic, current drug users with chronic hepatitis C. FIB-4 is a reliable, indirect marker for detecting liver fibrosis in patients with chronic hepatitis C. Given this, it is critical to identify factors that contribute to the progression of liver fibrosis and their possible differential effect we aimed to analyze patients’ demographic, clinical and laboratory data on FIB-4 elevations among young HCV mono-infected and HCV/HIV co-infected patients.

Methods: Patients were recruited in a unit for substance abuse treatment between 1994-2006. Socio-demographic, alcohol and drug histories and clinical care factors and provided questionnaires on sociodemographic, drug use, and clinical care factors and provided questionnaires on sociodemographic, drug use, and clinical care factors, including lab data. Of those tested, the prevalence rate of chronic HBV infection 6.1% (HBsAg positive). There was a prevalence rate of 6.1% but only 67.9 % were immunized

Conclusions: Clinical and laboratory parameters may anticipate future HCV-related mortality. Presenting author email: rpmuga.germanstrias@gencat.cat
MOPE175
Prevalence and correlates of hepatitis C virus co-infection in a Canadian cohort of HIV+ individuals receiving HAART

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Background: We evaluated the prevalence and correlates of HVC/HCV co-infection and compared rates of CDC-AIDS defining illnesses (ADIs) between HCV infected and HIV mono-infected individuals in a Canadian cohort of naïve patients initiating HAART.

Methods: Multivariate logistic regression was used to identify socio-demographic and clinical characteristics independently associated with HIV/HCV co-infection. ADIs rates per 1000 person years of follow-up (PYFU) post HAART were compared between groups. ADIs were categorized into six categories, by etiology.

Results: 3,988 HAART-recipients (80% male) were evaluated. The median age at HAART initiation was 40 (IQR: 34-46). In total, 951 (24%) were HCV co-infected. Baseline CD4 count was 180 (IQR 90-270) among HIV+, and 203 (IQR 110-390) among HCV+ co-infected. ADIs rates per 1000 PYFU were classified into six categories, by etiology.

Conclusions: Among Canadian HIV+ individuals initiating HAART, DU and non-ADIs were more frequent in HCV co-infected individuals. Risk of HCV co-infection increases up to age 45 and decreases thereafter. HCV-HCV co-infected were at increased risk of developing any ADI, HIV related diseases and fungal infection post HAART initiation.

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MOPE176
Impact of diabetes mellitus on sustained virologic response rate in HIV/HCV infected patients

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Background: Insulin resistance in HIV mono-infected patients is an accepted predictor of achieving a sustained virologic response (SVR) or therapy with interferon and ribavirin. There is more controversy on the role of insulin resistance in response to therapy in HIV/HCV co-infected patients. We sought to review our experience in co-infected patients with diabetes mellitus (DM) who underwent therapy with pegylated interferon and ribavirin.

Methods: Retrospective review of all patients with HIV/HCV who started HCV therapy in our inner city clinic, from 04/2001 thru 04/2008. Data collected were diabetes status, epidemiologic data, and relevant laboratory values related to HCV and HIV, treatment SVR rates, and anti-diabetic medication at the start of their therapy for HCV.

Results: The total number of co-infected patients treated during this period was 147 with 41 SVR, for a rate of 27%. Patients were divided into two groups, diabetics (Group 1) vs. non-diabetics (Group 2). The total number of patients in group 1 was 16 with only 1 patient achieving SVR, rate 6.25%. There was no significant differences in both groups as far as age, gender, race, ethnicity, mean CD4, percentage with undetectable HIV, mean CD4 titer of genotypes. Fisher’s Exact Test p-value = 0.042

Conclusions: Diabetes mellitus seems to be a poor prognostic factor for treatment response in co-infected patients. More research in this subgroup of HIV+ patients need to be done to improve their SVR rate.

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MOPE177
Early discontinuation of HCV treatment is not predicted by HIV status but by lifetime psychiatric diagnosis, poorer attention/psychomotor speed, and non-white race/ethnicity

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Background: Information on baseline demographic, psychosocial and clinical determinants of early HIV treatment discontinuation (by week 24) is needed to develop interventions to improve HIV treatment adherence.

Methods: Prospective study of HIV mono-infected and HIV/HCV coinfected treatment-naïve subjects beginning treatment with pegylated interferon/ribavirin. In an U.S. urban academic medical center. Chi-square and t-tests were used to investigate univariate relationships between baseline demographic, psychosocial and clinical variables and early treatment discontinuation for reasons other than HCV virologic non-response. Variables in each of the three categories found to be related in univariate analyses (p < 0.10) were entered into multiple logistic regression analyses. Variables found to be significant for each category (p < 0.05) were selected.

Results: 78 (46 HCV, 32 HIV/HCV) subjects who began treatment were predominately male (76%) and members of racial/ethnic minority groups (35% black, 29% Hispanic, 36% White). 29 subjects discontinued by week 24 (21 due to side effects; 8 due to viral failure) vs. (n= 49) were compared to those who discontinued treatment due to side effects (n=21). HIV status was not related to early treatment discontinuation (11/40 HIV subjects discontinued early due to side effects vs. 10/29 HIV- subjects; p=0.53). In univariate analysis the variables found to be related to early treatment discontinuation are non-white race/ethnicity, non-private health insurance, higher self-reported fatigue, higher self-reported physical symptoms, below normal hemoglobin, and anemia, lower self-reported depression, and higher neurocognitive test performance. The three variables found to the significant in the model are: older age at HAART initiation (AOR: 1.05, 95% CI: 1.02,1.08 per year up to age 45 and AOR: 0.94, 95% CI: 0.90,0.98 per year after age 45) after adjust-

Conclusions: Interventions to improve adherence to HIV treatment should focus on psychiatric conditions, cognitive functioning, and health disparities in racial/ethnic minority groups.

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MOPE178
Pilot study to evaluate safety and HCV kinetics in HIV/HCV co-infected patients with less than 200 CD4+, treated with peginterferon alfa-2b and ribavirin (P04675 study)

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Background: International guidelines, do not recommend treatment with pegylated interferon plus ribavirin in HIV co-infected patients with advanced immunodeficiency due to concern over poor virological response and risk of AIDS-defining events. However, therapeutic data in this population are scarce.

Methods: Prospective, open, multicenter, controlled study. 11, genotype 1, HCV treatment naïve, adult co-infected patients, on stable HAART, were treated with PegIFN alfa-2b (120KD) and ribavirin (according to body weight). Group A: CD4 <200 cells/mm3 (n=5) and Group B: CD4 >200 cells/mm3 (n=6). Safety and viral kinetics during the first 12 weeks of treatment were evaluated. HCV-RNA quantification was obtained at weeks: 0,1,2,3,6,8,12 (log10). HOMA index > 2.4 in 100% and 66%.

Results: Male 8/11, 36% with advanced fibrosis Child-A. Median baseline CD4: 146-234 vs. 499-521. No patient received AZT or d4T. No statistical differences were found at baseline regarding: age (median years) 46 vs. 42, BMI: 22 vs. 24, HCV RNA, 6.26 vs. 5.88 (log10). HOMA index > 2.4 in 100% and 66%.

No patient cleared HCV-RNA at Week 4. At Week 12, 0/5 and 2/6 patients were HCV-RNA negative; 3/5 and 2/6 patients at week 24. No statistical differences were found in viral kinetics at each point, among these groups 

Conclusions: Treatment in patients with advanced immunodeficiency was safe, without AIDS-defining events. Viral kinetics was comparable in this group of immunosuppressed patients with several viral virological response. A tendency towards a better viral response was observed in patients with better immunological status. This data encourages further studies in this population.

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Sexually transmitted infections (STI) MOPE0180-MOPE0198

MOPE0179

Transient elastometry (Fibroscan®) appears not to be applicable in HIV monoinfected patients with elevated liver function tests
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Background: Elevated liver function tests (eLFT) in HIV monoinfected patients (pts) have been previously reported, caused by several medical conditions such as hepatic steatosis, non-alcoholic steatohepatitis (NASH), nodular regenerative hyperplasia or drug toxicity. They may lead to liver fibrosis or portal hypertension. The best method to stage liver disease in those pts has not yet been established.

Methods: We performed transient elastometry (Fibroscan®), liver biopsy, and laboratory analysis in HIV- and HCV infected pts and in HIV/HCV-coinfected pts.

Results: 31 pts were included (mean age 45years, range 29-63, 24 male. The three groups (HCV, HIV/HCV, HIV) were comparable with regard to age, HIV and HCV viral load and standard laboratory markers. BMI was higher in HIV infected pts (25, 22 and 20 kg/m², respectively). The percentage of pts with significant hepatic steatosis (more than 10%) was 33%, 22% and 38%, respectively.

Conclusion: Fibroscan® estimated the fibrosis stage consistently higher compared to liver biopsy in HCV monoinfected pts. Assessment of significant fibrosis by transient elastometry was concordant with the liver biopsy in only 25% of cases in this group, while being 73% for HIV infected pts and 45% for HIV/HCV coinfected pts.

No difference was found for markers of insulin resistance or inflammation, such as interleukin-6, d-dimers or CRP between the three groups.

Conclusion: Classical methods to assess the stage of liver disease do not seem to be applicable for HIV monoinfected patients with eLFT.

Our ongoing clinical database showed a trend that HIV monoinfected patients with eLFTs may be falsely overestimated by fibrosis assessment with fibroscan® or APRI score. Further studies will be needed to identify possible causes of this phenomenon which might help to alterate the established algorithms for these pts.

MOPE0181

Herpes simplex virus infections among rural residents in Eastern China
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Objective: To solicit age- and gender-specific seroprevalence of herpes simplex virus infections (HSV-1 and HSV-2) among rural residents in a costal area of Eastern China.

Methods: A cross-sectional survey was conducted in two randomly selected rural communities. All permanent residents aged between 1 to 59 years were inform-consented and recruited to participate in the survey. Seroprevalence of HSV-1 and HSV-2 was determined by type-specific antibody tests using the HerpeSelect HSV-1 and HSV-2 ELISA IgG kit (Focus Technologies, CA, USA), 95% confidence intervals (CIs) were calculated according to the Clopper-Pearson method using stata 11.0 (Statacorp, Texas, USA).

Results: A total of 2,190 participants participated in the survey, with a response rate of 80.1%. HSV-1 seroprevalence was 88.4% (95% CI, 69.3%-100%) overall, 86.8% (95% CI, 56.0%-100%) for males and 90.0% (95% CI, 81.5%-98.5%) for females. It was as high as 56.4% among children < 5 years old, kept rising to nearly 100% among the elders. The overall HSV-2 seroprevalence was 11.8% (95% CI, 0.1%-23.5%), 9.7% (95% CI, 5.0%-14.9%) for males and 13.8% (95% CI, 0.3%-23.5%) for females. It was 9.7% among children < 5 years old, zero among those aged 5-14 years, and peaked (24.3%) at 45-49 years (Figure 1). Neither HSV-1 nor HSV-2 shown gender differences in age-specific seroprevalence.

Conclusion: HSV-1 was highly prevalent throughout all age groups among rural residents in Eastern China, whereas HSV-2 was prevalent among sexually active people. HSV-1 and HSV-2 have different transmission modes and need particular concerns in the era of HIV/AIDS pandemic.

Sexually transmitted infections in females MOPE0182

Sexually-transmitted infections and risk factors in female sex workers in Buenos Aires, Argentina
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Background: Sexually transmitted infections (STIs) are a major global health concern and have been associated with an increased risk for human immunodeficiency virus (HIV) infection. STIs are often concentrated and spread through groups such as female sex workers (FSWs), who have a high number of partners and poor healthcare-seeking behavior. This study aims to investigate the incidence of STIs among FSWs in Buenos Aires, Argentina and understand the risk factors for infection in this unique population.

Methods: FSWs who presented with a complaint of vaginal discharge to a women's health clinic underwent a physical examination including which cervical swabs, lavages, and blood samples were collected and tested against a panel of STIs. Thirty subjects were also recruited to complete an anonymous questionnaire to obtain information about their socio-demographic, behavioral characteristics, and risk factors for STIs. Patients who were pregnant or had known HIV-positive status were excluded.

Results: Three-hundred and seventeen FSWs were screened for STIs. Amongst this population, the incidence of Chlamydia was 85% (201/237), Chlamydia was 85% (119/137), HPV was 31% (98/317), syphilis was 4% (12/317), and new diagnosis with HSV was 3% (10/317). No cases of active herpes or gonorrhea infection were detected. Analysis of socio-demographic and behavioral characteristics demonstrated that extreme risk taking behavior and low levels of education were prominent despite sufficient access to health care.
Background: Oropharyngeal cancer (OPC) has increased in the USA since 1973, especially among HIV-men, and oral HPV (OPHPV) is a recognized potential risk factor. We conducted a pilot study to evaluate sampling methods to determine the prevalence of OPHPV in HIV+ patients attending our dental clinic.

Methods: Data on demographics, antiviral drug use, sexual history, smoking, and alcohol consumption were collected and an oral exam was performed on each participant. An oral rinse with saline solution (OR) and mucosal brushings (BM) were collected. Brushings of tonsil (BT) and oral lesions (BOL) were collected if present. HPV detection and typing were performed on DNA extracted from the Fusche Linear Array HPV Genotyping Assay.

Results: Of the 100 enrolled patients, 65 were men. The median age was 47 years, duration of HIV infection was 14 years, and current CD4+ counts 350 in 30% of patients. OPHPV was detected in 39% of the oral rinse samples; 24 of those had high-risk HPV (61.5%) and 17 (43.5%) had multiple types. Overall, 27 different genotypes were detected in 57% of BOL, 13% of BM and 12% of BT, these were all OPHPV. HPV infection was associated with receptive oral sex (t=3.15, p=0.002), and non-response (6.9%) and oral sex (0.65%) rates. Patients present for 3-year follow-up were analyzed (n=83). Number of syphilis events (relapse/reinfection), including baseline event, was recorded. ANOVAs and t-tests examined relationships between total occurrences of relapse/reinfection with suspected risk factors.

Conclusions: OPHPV was recovered in 39% of oral samples. Oral rinse samples provided the best representation of HPV types in the oral cavity. The principal predictor of OPHPV infection is receptive oral sex. Safe oral sex practice should be reinforced in HIV+ patients.

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MOPE183
Oral sampling for HPV detection and genotyping in HIV-infected patients
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Background: Oropharyngeal cancer (OPCA) has increased in the USA since 1973, especially among HIV-men, and oral HPV (OPHPV) is a recognized potential risk factor. We conducted a pilot study to evaluate sampling methods to determine the prevalence of OPHPV in HIV+ patients attending our dental clinic.

Methods: Data on demographics, antiviral drug use, sexual history, smoking, and alcohol consumption were collected and an oral exam was performed on each participant. An oral rinse with saline solution (OR) and mucosal brushings (BM) were collected. Brushings of tonsil (BT) and oral lesions (BOL) were collected if present. HPV detection and typing were performed on DNA extracted from the Fusche Linear Array HPV Genotyping Assay.

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Conclusions: OPHPV was recovered in 39% of oral samples. Oral rinse samples provided the best representation of HPV types in the oral cavity. The principal predictor of OPHPV infection is receptive oral sex. Safe oral sex practice should be reinforced in HIV+ patients.

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MOPE185
Factors associated with syphilis relapse/reinfection or development of neuro- or systemic syphilis
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Background: Factors related to adverse outcomes (neurosyphilis, systemic syphilis) include: [t>1:1], <1:100, >1:100 and CD4 counts < 350. To test these and additional factors associated with systemic syphilis, relapse, and reinfection we established this study. This goal is to identify factors associated with syphilis relapse/reinfection or systemic syphilis among HIV-positive individuals.

Methods: An HIV clinic in a teaching hospital in New York City was utilized. Data were collected via chart review (01/01/2005 - 12/31/2009). HIV-positive adults with a baseline syphilis event in 2005/2006 were screened (n=160). Means: age=36.34, CD4=402.86, VL=58.770. Median titer = 1:32. Participants were 17.5% white, 27.5% black, 46.3% Hispanic, 8.3% Asian/other ethnicity, 91.9% MSM, 6.9% heterosexual male, 0.6% female, 0.6% transgender (MTF). Previous syphilis history was 43.80%, Unsafe genital/anal sex was 52.5%. Treatment standard of care was benzathine penicillin, 3 injections. Providers identified reinfection (30%), relapse (2.5%), treatment non-response (6.9%), and neurosyphilis (0.65%) rates. Patients present for 3-year follow-up were analyzed (n=83). Number of syphilis events (relapse/reinfection), including baseline event, was recorded. ANOVAs and t-tests examined relationships between total occurrences of relapse/reinfection with suspected risk factors.

Results: Those reaching endpoint had a single syphilis event (57.8%), two syphilis events (relapse/reinfection, 37.3%), or three or more events (relapse/reinfection, 4.9%). Age < 40 [t(80) = 2.33, p < 0.023] and history of previous syphilis [t(80) = -2.391, p < 0.021] correlated with increases in relapse/reinfection.

Conclusion: Considering multiple factors is important for providers who predict and determine syphilis relapse/reinfection risk. Young age and previous history of syphilis appeared as risk factors, whereas traditional factors (titer, CD4) did not. Neuro- and systemic syphilis are uncommon in follow-up after 3 penicillin injections.

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MOPE186
Impact of acute hepatitis A virus infection (AHAV) on HIV-viral load (VL) and influence of HIV on AHAV
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Background: AHAV may be a sexually-transmitted disease among homosexual men (HMX). Therefore HIV-AHAV co-infection can occur but the impact of each virus on the other is not known. Our aim was to assess the effect of AHAV on HIV infection and the influence of HIV infection on AHAV.

Methods: single-centre study of a series of HIV-patients diagnosed with AHAV during 2008-2009. The impact of AHAV on HIV-VL was defined as an increase >6.5 log, during the event with respect to the “before” AHAV value, or a detectable HIV-VL for those previously suppressed patients. Forty one HIV-negative patients diagnosed with AHAV in our hospital during the same period were included as a control group.

Results: 23 HIV men with AHAV were identified. All but one were HMX, mean age=34.0 (27-43) years, and 15 (65.4%) were HIV-positive in 2006. AHAV events in 4 cases, HIV and AHAV coinfection were diagnostic. The effect of AHAV on HIV-VL was analyzed in 16 patients (12 on HAART), and impact of HIV on AHAV in 3 on HAART and 3 naive patients. CD4 cells count was similar before and during AHAV. No factor associated with the impact of HAHA on HIV was identified. HIV-negative patients (15 men) were younger than HIV-subjects (26 vs 25 years, p<0.0001), reached a higher peak level of AST (2469 vs 11311 U/L, p=0.001), and total bilirubin (9.7 vs 5.8 mg/dl, p< 0.01) and normalized transaminases levels earlier than HIV patients (94 vs 178 days, p< 0.05).

Conclusions: in this series of cases, AHAV was associated with an impact on HIV-VL in more than one third of patients. HIV infection was associated with a lower peak level of AST and total bilirubin, and a longer time to reach normal values of transaminases. AHAV may have important epidemiological and clinical implications in HIV population.

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MOPE187
Etiological diagnosis of genital ulcers in India - is there a need for revision of national treatment guidelines?
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Background: Genital ulcer disease (GUD) has been associated with increased risk of HIV transmission. In India, the national GUD algorithm recommends treatment for HSV-2 for those with vesicles only and other GUD are treated for syphilis and chancroid. The objectives of the study were to determine the etiology of GUD and assess the need for revision of national GUD algorithm in India.

Methods: Males with genital ulcers attending eight government and NGO

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95
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Monday 19 July
Poster Exhibition

Tuesday 20 July
Author Index

95
STI clinics in four Indian states were enrolled from May 2008 to June 2009. A questionnaire was administered, clinical examination performed and treatment provided as per national guidelines. A multiplex polymerase chain reaction was used to detect and diagnose Treponema pallidum (TPT), herpes simplex virus (HSV) and human immunodeficiency virus (HIV) DNA. Women were tested for HIV by ELISA and if positive by HIV-1/HIV-2 Western Blot. Subjects were tested for CIN by colposcopy and biopsy. Biopsy results, TCD4+ cells count, and serum HIV-1 RNA levels were used to determine the risk factors for CIN.

Results: Of 184 cases of CIN investigated, the etiology of CIN was attributable to HIV (30%), TP (9%) and mixed infections (2%). Only one case of HIV infection was not identified in 113 CIN cases (61%). The specificity, sensitivity and positive predictive value (PPV) of syndromic diagnosis of non-HIV-related CIN was 58%, 61% and 44% respectively. Herpetic CIN diagnosis had a sensitivity and specificity of 61%, 68% and 53% respectively. Of 71 cases where etiological diagnosis was available, 29 (41%) cases of CIN were confirmed as either non-HIV (22 cases) or herpetic (7 cases) and hence did not receive correct treatment.

Conclusions: Poor sensitivities, specificities and predictive values were observed when CIN were clinically classified as non-herpetic and herpetic, which led to incorrect treatment. This necessitates a review of existing national STI treatment guidelines to include treatment for both herpes and syphilis for all CIN patients in India based on the latest World Health Organization (WHO) guidelines.

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MOPE1018
Prevalence of asymptomatic gonorrhea and chlamydia among men having sex with men (MSM) in India and associated risk factors

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Background: There is limited data on the prevalence of sexually transmitted infections (STIs) among MSM in India. We studied the prevalence of symptomatic and asymptomatic rectal, urethral and pharyngeal gonorrhea and chlamydia among MSM and the risk factors found to be associated with acquiring these infections.

Methods: During 2008-2009, 513 MSM were recruited from four clinics at two cities of Mumbai and Hyderabad. A questionnaire was administered, clinical examination performed and laboratory samples collected. All MSM were screened for gonorrhea and chlamydia using Amsel’s test for the samples and pharyngeal swabs, and Roche PCR for rectal swabs. Risk factors such as age, sexual orientation, number of sexual partners, drug use, health seeking behavior and condom use in the last sexual act were analyzed using multivariate analysis.

Results: In multivariate analysis, the association of risk factors was highest amongst MSM who were engaged in commercial sex (P < 0.1). Other risk factors included concurrent multiple sexual partners (P < 0.05), low condom use during last sexual act (P > 0.05) and poor health seeking behavior (P > 0.20).

Conclusions: The prevalence of asymptomatic gonorrhea and/or chlamydia is high amongst MSM in India. These findings re-iterate the existing national STI treatment guidelines which recommend presumptive treatment for gonorrhea and chlamydia amongst high-risk MSM especially those who engage in commercial sex, have concurrent partners, and low condom use. Regular clinical examination of all three anatomical sites (ano-rectum, urethra and pharynx) and presumptive/regular treatment remains the cornerstone for control of STIs and HIV among MSM in India.

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MOPE1019
Risk factors for cervical intraepithelial neoplasia in HIV-infected women

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Background: Cervical intraepithelial neoplasia (CIN) is a precursor of invasive cancer. CIN lesions are usually adequately excised by loop electrosurgical excision procedure (LEEP), which largely preserves cervix anatomy and function. However, women treated for pre-invasive cancer are at risk for recurrence (5% to 35%), and a strict follow-up after LEEP is essential. There are several factors associated with CIN recurrence: margin involvement; histopathologic CIN grade; glandular involvement; persistent HPV infection; and immune responses against HPV. In this study we aimed to identify risk factors associated with recurrence of CIN following LEEP in women with and without HIV.

Methods: This is a case-control study. Cervical samples were collected between 1999 and 2004. Recurrence/residual diagnosis was established after conization, and tissues were fixed in formalin and embedded in paraffin by ten years. Polymerase chain reaction (PCR) was used to detect the human papillomavirus genome (HPV DNA), types 16,18,31,33,35. Statistical analysis was performed using X2 test with Yates correction and the Fisher’s exact test or comparison of categorical variables. Multivariate analysis was carried out using logistic regression models.

Results: A total of 33 patients with recurrent CIN and 105 without recurrence were enrolled. HIV-infection (p=0.001), glandular involvement (p=0.000), and compromised margins (p=0.02) were significantly associated to CIN recurrence. HPV DNA was present in 57.6% of patients with CIN recurrence. High-risk HPV subtypes were detected in most cases but were not associated with recurrence (p=0.27). Glandular involvement (p=0.0001), glandular involvement (OR = 2.3; 95%CI = 1.2- 4.6; P =.002) and high-risk HPV DNA, were predictors of genital dysplasia in HIV infected women.

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MOPE1080
Cervical intraepithelial neoplasia recurrence after conization in HIV infected and non infected women

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Background: Cervical intraepithelial neoplasia (CIN) is a precursor of invasive cancer. CIN lesions are usually adequately excised by loop electrosurgical excision procedure (LEEP), which largely preserves cervix anatomy and function. However, women treated for pre-invasive cancer are at risk for recurrence (5% to 35%), and a strict follow-up after LEEP is essential. There are several factors associated with CIN recurrence: margin involvement; histopathologic CIN grade; glandular involvement; persistent HPV infection; and immune responses against HPV. In this study we aimed to identify risk factors associated with recurrence of CIN following LEEP in women with and without HIV.

Methods: This is a case-control study. Cervical samples were collected between 1999 and 2004. Recurrence/residual diagnosis was established after conization, and tissues were fixed in formalin and embedded in paraffin by ten years. Polymerase chain reaction (PCR) was used to detect the human papillomavirus genome (HPV DNA), types 16,18,31,33,35. Statistical analysis was performed using X2 test with Yates correction and the Fisher’s exact test or comparison of categorical variables. Multivariate analysis was carried out using logistic regression models.

Results: A total of 33 patients with recurrent CIN and 105 without recurrence were enrolled. HIV-infection (p=0.001), glandular involvement (p=0.000), and compromised margins (p=0.02) were significantly associated to CIN recurrence. HPV DNA was present in 57.6% of patients with CIN recurrence. High-risk HPV subtypes were detected in most cases but were not associated with recurrence (p=0.27). Glandular involvement (p=0.0001), glandular involvement (OR = 2.3; 95%CI = 1.2- 4.6; P =.002) and high-risk HPV DNA, were predictors of genital dysplasia in HIV infected women.

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MOPE1019
Predictive factors of neurosyphilis in HIV-infected patients; are all stages of syphilis equal?

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Background: Early infection with Treponema pallidum can lead to central nervous system invasion. Criteria to decide when to perform a lumbar puncture (LP) in HIV-infected patients with syphilis are controversial. Predictors of neurosyphilis (NS) are often derived from cohorts including all stages of the disease (early and late). The objective of this study was to identify predictive factors of NS in a cohort of HIV-infected patients with early disease (less than one year) only.

Methods: We reviewed 70 cases of HIV-infected patients with documented early syphilis who underwent a LP to rule out NS. Demographics, clinical findings known to be associated with NS, stage of syphilis and laboratory data (CSF cell count, HIV-1 viral load, serum rapid plasma reagin (RPR) titer) were recorded. NS was defined as a white blood cell count ≥200/µL and/or a reactive cerebro-spinal fluid Venereal Disease Research Laboratories (VDRL) test.

Results: Seventeen of the 70 cases (24.3%) had early NS. Presence of visual symptoms, CSF cell count ≤500 cells/µL and uncontrolled HIV-1 viremia (RPR >500 pM/mL) were significantly associated with NS in the multivariate model (p=0.007 and p=0.036). Other clinical manifestations such as headache, fever, hearing loss and tinnitus were not associated with early NS. Surprisingly, serum RPR titer were not in any way associated with early NS (p=0.525) by logistic regression analysis.

Conclusions: Visual disturbances and CSF cell count ≤500 cells/µL are predictors of early NS in HIV-infected patients. Moreover, serum RPR titer does not seem to have the predictive value for NS of 18,43,21,35. Study of syphilis. We should therefore not decide to perform a LP based solely on serum RPR titer in early syphilis.

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MOPE0192
Prevalence of HIV in patients diagnosed with gonorrhoea in a STI clinic in Madrid, Spain

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Background: Sexually transmitted infections (STI) increase the risk of transmission of HIV. The objectives of this study were to evaluate the prevalence of HIV infection in patients diagnosed with gonococcal infection in a STI clinic in Madrid during the period 2007-2008.

Methods: During the stated period 8483 samples were studied, 31.9% obtained from men and 68.4% from women: 38% were heterosexual, 36% were female sex workers and 25% were men who have sex with men. Simultaneously all these patients had the test for HIV infection. The diagnostic techniques used were real-time PCR for the detection of CT and MEIA and Western-blot for the diagnosis of HIV. All patients filled in a structured epidemiological questionnaire.

Results: Out of the 8.604 analyzed samples 504 (5.9%) were positive for N. gonorrhoeae. Of these 85% were men and 15% women. The prevalence of HIV-positive samples in patients diagnosed with gonococcal infection was 22.4% (23% in men and 0% in women). The prevalence of HIV depending on the site of the infection by NG was: 37% in patients with proctitis, 21% in those with pharyngitis (40% in men and 0% in women), 18% in those with urethritis and 0% in women with cervicitis.

Conclusions: A high prevalence of HIV was detected among men infected by gonococci, especially among those with rectal and pharyngeal infection. It is highly advisable to test for HIV infection in patients infected by N. gonorrhoeae and the screening for other STIs in HIV-positive patients.

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MOPE0193
The relationship of serological parameters in syphilis and the response to cellular adaptive immunity in HIV-coinfected MSM

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Background: The incidence of acute syphilis has increased substantially in MSM. Stages of syphilis including neurosyphilis seem to be accelerated in patients co-infected with HIV. The serological differentiation between acute and persistent syphilis is often difficult because of an altered antibody decline and persisting syphilis is often difficult because of an altered antibody decline and persisting syphilis is often difficult because of an altered antibody decline. The aim of this study was to elucidate the serological and clinical course of syphilis in a homogeneous group of MSM, being HIV-negative or HIV-positive, respectively.

Methods: Retrospective cohort study of all MSM with acute syphilis, treated within 3 years in a Private Clinic for Infectious Diseases. Serological and clinical data regarding syphilis and HIV infection were analyzed at the day of syphilis diagnosis and after 1, 3, 6 and 9 months. Different statistical tests were used.

Results: 216 patients (82 HIV-negative and 134 HIV-positive) were enrolled in the study. HIV-positive patients presented significant higher TPHA-, VDRL- and FTA-ABS titers at the day of diagnosis compared to the HIV-negative MSM. One month after diagnosis, TPHA- and VDRL-titers were still significantly higher in the HIV-positive group. HIV-positive patients demonstrated significant more systemic syphilis symptoms including neurosyphilis in 80% compared to 0 cases in the group of HIV-negative patients. In HIV-positive MSM TPHA-, VDRL- and FTA-ABS titers were negatively correlated to the numbers of NK- and CD4+ cells at the onset of syphilis and 1 month later, respectively. In addition, a positive correlation between TPHA-, VDRL- and FTA-ABS titers to the numbers of CD4+ and CD8+ lymphocytes could be observed after 1, 6, and 9 months, respectively.

Conclusion: HIV-positive MSM suffering from acute syphilis demonstrated a stronger immune response and higher risk for neurosyphilis as compared to HIV-negative MSM. Correlation of TPHA-, VDRL- and IgM-concentrations to parameters of the cellular immune response could be observed in HIV+ and possibly used for further differentiation of syphilis stages.

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MOPE0194
Prevalence of HIV in patients diagnosed with chlamydia trachomatis in a STI clinic in Madrid (Spain)


Background: Sexually transmitted infections (STI) increase the risk of transmission of HIV. To describe the epidemiologic characteristics of patients diagnosed with chlamydia trachomatis (CT) infection and to determine if C. trachomatis co-infection in a STI clinic in Madrid (Spain) and it’s relation to HIV infection.

Methods: From 8.604 urethral, cervical, rectal and rectal swab samples obtained for the diagnosis of CT infection. Simultaneously all these patients had HIV serology. The diagnostic techniques used were real-time PCR for the detection of CT and MEIA and Western-blot for the diagnosis of HIV. All patients filled a structured epidemiological questionnaire.

Results: Out of the 8.604 analyzed samples 64% (68% from female and 31% from male): 39% were heterosexual, 36% were female sex workers (FSW) and 25% were men who have sex with men (MSM). Out of the total of analyzed samples, 755 (9.3%) were positive for CT. According to the exposure category of the patients infected by CT 40% were HIV-negative MSM and 19% HIV-positive MSM. The median age for the infected patients was 29. The prevalence for HIV infection in patients diagnosed with CT infection was 22% (40% in MSM, 3% in heterosexual and 0% in FSW). The prevalence of HIV depending on the site of the infection by CT was: 56% in patients with proctitis, 27% in those with pharyngitis, 14% in those with urethritis and 0% in women with cervicitis.

Conclusions: A high prevalence of HIV was detected among MSM with infection by CT. It is highly advisable to test for HIV in patients infected by CT and the screening for other STIs in HIV-positive patients.

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MOPE0195
Effectiveness of leukocyte esterase dipstick test for management of urethral discharge syndrome

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Background: Syndromic management of Urethral Discharge (UD) based on clinical symptoms and signs is practiced in most developing countries. Simple point-of-care tests are advocated for enhanced syndromic management in settings which do not have access to microscopy. The objective of the study was to determine if the use of Leukocyte Esterase Dipstick (LED) improves the accuracy of diagnosis of Neisseria gonorrhoeae (NG) and Chlamydia trachomatis (CT) infections among males with UD.

Methods: During 2008-09, 244 males attending eight government and NGO STI clinics in four Indian states with complaints of genital discharge and/or dysuria were enrolled. A detailed history was elicited and clinical examination performed. First void urine samples were obtained for testing with LED and for NG/CT using Aptima Combo 2 (AC2).

Results: The overall prevalence of NG and/or CT by AC2 was 16.4%. The validity of UD diagnosis-sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) by using LED test along with history and clinical examination was compared with that of standard AC2, was determined.

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MOPE0196
Cervical HPV infection is not associated with increased HIV shedding in cervico-vaginal fluids of women with HIV-infection

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Background: To evaluate the association between cervical Human Papillomavirus (HPV) infection and Human Immunodeficiency Virus (HIV) shedding in cervico-vaginal lavages (CVL) of HIV-infected women, considering other confounding factors.

Methods: We performed a cross-sectional investigation in HIV-infected women recruited at the Department of Infectious Diseases of Brescia (Italy) between July 2003 and August 2007. Each woman had endocervical brushing for HPV detection and paired peripheral blood and CVL samples in order to assess the presence of HIV-RNA. The association of timing from first diagnosis of HIV infection, history of antiretroviral therapy, immunological status, HIV exposure category, presence of genital infections with HIV shedding in CVL was evaluated.

Results: 94 women had evaluable HPV and HIV data. Seventy-three women (78%) were positive for HIV infection but 30% of them had a type 16 and/or 18 infection. Cell-free HIV-RNA was detected in 29% of CVL samples. Plasma viral load was undetectable in those with positive HIV shedding. The proportion of women with detectable HIV-RNA in CVL, was similar in those with and without cervical HIV infection (CM:1.10; 95% CI 0.31-
Prophylaxis of HIV associated infections; vaccines e.g. pneumococcal, hepatitis and HPV, co-trimoxazole prophylaxis and IPT

MOPE0197
High prevalence of human papillomavirus infection among HIV-infected men in Taiwan

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Background: Human papillomavirus-associated diseases are increasing among people living with HIV/AIDS (PLHIV). To our knowledge the prevalence of HPV infection among male PLHIV in Taiwan is not well described.

Methods: 361 PLHIV who attended the outpatient clinics of Taoyuan General Hospital, Taiwan, had been enrolled voluntarily. Control group were HIV-negative men who attended the same clinic. All of the subjects completed the self-administered questionnaire. Perineal samples were collected for Linear Array HPV genotyping test.

Results: Totally 400 subjects were enrolled. There are 299 subjects who are HIV-infected, including 159 injecting heroin users, 102 men who have sex with men (MSM), and 38 heterosexual men. There are 101 HIV-negative subjects for control. Their mean ages are 33.91±9.58 year old. There are 40.13% (N=199) of injection drug users, 54.64% (OR=7.14, 95% CI=3.40 to 15.21, p<0.0001) of MSM, and 58.33% (OR=3.15, 95% CI=1.03 to 9.58, p<0.0001) of heterosexual men who have HIV infection, compared with HIV-negative group (14.3%). Type 52, 16 are commonly encountered oncopapillae, whereas type 84, 62, 53 are frequently encountered non-oncopapillae. HPV vaccine strains (HPV type 6, 11, 16, and 18) compose 14.57% of total strains. Lower CD4+ T cells counts correlate with higher rate of HPV prevalence (p=0.05) and oncogenic HPV infection (p=0.04).

Conclusions: Our data indicated that the prevalence of HPV infection among HIV-infected men including injection drug users, is high. PLHIV with low CD4 T cells counts have higher rates of HPV infections. Large scale of HPV surveillance for PLHIV would be suggested.

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MOPE0198
Baseline absolute CD4 counts and viral loads in HIV-infected individuals with lymphogranuloma venereum: the results of a multi-centre case control study in the UK, LGV-net

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Background: The lymphogranuloma venereum (LGV) epidemic in Europe disproportionately affects HIV-positive men who have sex with men (MSM). It has been speculated that HIV-associated immunosuppression predisposes individuals to LGV and that acute LGV may cause immunosuppression and an increase in HIV viraemia.

Methods: In a case control study at 6 UK centres in 2009, LGV cases in MSM were compared to 2 LGV negative control groups; symptomatic MSM and asymptomatic MSM. Data were collected from patients and clinicians using web based computer assisted self interview questionnaire providing clinical and behavioural data. In HIV-positive individuals current and previous CD4, CD8 and viral loads were recorded.

Results: LGV-net recruited 76 cases and 147 controls. HIV coinfection was present in 63 (84%) cases and 87 (59%) controls. The median age was 39 years (range 23-62), 12% cases were gay, 35 (38%) had no symptoms and 8 (12%) had genital symptoms of dysuria, urethral discharge, lymphadenopathy or ulcer. Constitutional symptoms were described by 25 (38%) patients. Hepatitis C was positive in 10%. Amongst those with HIV infection, median CD4 at diagnosis in patients with LGV was 333 cells/µl (1QR 384 – 664) compared to 542 (420-662) in symptomatic control, and 574 (331-610) in asymptomatic controls. These differences were not significant (p=0.27). There were no significant differences between the 3 groups in terms of duration of HIV infection, uptake of HAART and median viral load. The proportion of cases of rectal cancer and median viral loads of individuals with LGV will be analysed.

Conclusion: This study does not support the hypothesis that HIV associated immunosuppression predisposes individuals to LGV and suggests that behavioural factors are likely to be more important. Longitudinal analysis of CD4 counts and viral loads of HIV negative individuals with LGV is ongoing to determine whether this infection does cause transient immunosuppression and immune activation.

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MOPE0199
The impact of ethnicity on antibody responses after pneumococcal vaccination among HIV-infected adults

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Background: Streptococcus pneumoniae infections are important causes of morbidity and mortality in HIV-infected persons. Rates of disease and responses to pneumococcal vaccination may vary by ethnicity. We evaluated the impact of ethnicity on antibody responses to PPV and conjugate 7-valent (PCV) among HIV+ adults.

Methods: We conducted subgroup analyses of capsule-specific IgG responses to PCV and PPV for 4 serotypes at day 60 post-vaccination and among HIV-infected participants previously vaccinated with PPV. Geometric mean titers (GMT) were compared with adjusted regression models; proportions with a positive immune response (≥2-fold rise in capsu-

Results: 204 HIV+ adults were randomized: 131 received PCV and 73 PPV. Among the Caucasians (n=111) and AA (n=77), the median age was 42 years, median CD4 was 540 cells/µl, and 81% were receiving HAART. Pre-vaccination antibody levels did not vary by ethnicity. When vaccine arms were analyzed separately and combined, the mean changes in GMT from baseline were not significantly different between Caucasians and AA. Mean changes in GMT (log10, ng/mL) at day 60 post-vaccination (Caucasians vs. AA) in the combined vaccine arms were: 0.41 vs. 0.36, p=0.54 for serotype 4; 0.54 vs. 0.41, p=0.12 for serotype 9V; 0.41 vs. 0.34, p=0.48 for serotype 14; and 0.17 vs. 0.14, p=0.72 for serotype 19F. The proportion of Caucasians and AA who achieved a positive immune response after revaccination was similar (69% vs. 63%, respectively, p=0.65).

Conclusions: In our ethnically diverse cohort with equal access to care, we did not observe differential post-vaccination antibody responses between AA and Caucasian HIV+ adults. These data suggest that African American and other ethnic minority populations should be given the same pneumococcal vaccines in the absence of data regarding differences in vaccine safety.

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MOPE0200
Long-term durability of immunogenicity after hepatitis A vaccination among HIV-infected adults

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Background: HIV-infected persons (HIV+) have an elevated risk for hepatitis A virus (HAV) infection. Although HAV vaccination provides long-term immunity among the general population, there is no data examining the durability of responses among HIV+.

Methods: We evaluated HIV+ adults who received two HAV vaccinations administered 6-18 months apart and had blood specimens available at 12±6 months and 2 years after second vaccination. Participation had a 96% response rate. HAV IgG level prior to vaccination. HAV IgG antibody concentrations were quantified using the Quantitative HAVH PLUS enzyme immunassay; concentrations ≥10 mIU/mL were considered protective.

Results: 130 HIV+ adults were evaluated with a median age of 35 years, 86% were male, and 51% were Caucasian. Out of 460 HAV vaccination, median CD4 count was 437 and 62% were receiving HAART.
Initial vaccine responses were achieved in 89% (95% CI, 81%-94%) of HIV+ compared to historical HIV-uninfected persons (HIV-) with response rates of 100% (95% CI, 84%-100%). Among initial HIV+ vaccine responders (n=116), 90% (95% CI 83%-95%) maintained a concentration of ≥10 mIU/mL at 3 years. Of those who were seropositive at 3 years with available specimens (n=65), 95% (95% CI, 87%-99%) maintained seropositivity at 6-10 years. Geometric mean concentrations (GMC) at 12+/−6 months, 3 years, and 6-10 years among HIV+ were 155, 119, and 49 mIU/mL, respectively. Concentrations were lower than HIV-: GMC of 1734, 687 and 684 mIU/mL, respectively. Factors associated with higher GMC over time included lower log10 HIV RNA level (b=−0.268, p=0.005, with a trend for higher CD4 counts (b=−0.00015, p=0.005).

Conclusions: HIV+ adults achieved high initial seroconversion rates after hepatitis A vaccination with good durability of responses up to 6-10 years. Since HIV+ achieved lower GMC than HIV-uninfected persons, revaccination of this group may be necessary; further studies evaluating the persistence of antibody levels beyond 10 years are needed.

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Background:
Disseminated fungal infections are common presenting opportunistic infections among AIDS patients in developing countries. Prophylaxis with itraconazole has been shown to be effective in northern Thai-land. This study aimed to compare the efficacy of fluconazole vs. itraconazole as primary prophylaxis for fungal infections in HIV-infected patients.

Methods:
A retrospective cohort study was conducted among HIV-infected patients who received primary prophylaxis with fluconazole 400 mg once weekly or itraconazole 200 mg once daily at Chiang Mai University Hospital. We compared the incidence of systemic fungal infections and the probability of disease-free survival between groups.

Results: From January 2000 to August 2009, 308 HIV-infected patients who received primary prophylaxis were enrolled; 160 were male. 276 patients received fluconazole and 32 received itraconazole. Baseline CD4+ cell count was 35 (IQR 15, 70) and 50.5 (IQR 21,75) cells/µl in fluconazole and itraconazole groups, respectively (p=0.159). The median follow-up time was 12 months (IQR 7, 19) in fluconazole group and 15.5 months (IQR 9, 21.5) in itraconazole group. Seven patients (2.5%) who received fluconazole and 2 patients (6.3%) who received itraconazole developed systemic fungal infec-tions, giving the incidence of 17.0 and 34.8/10000 person-months, respectively (p=0.061). The probability of developing any systemic fungal infections or death did not differ between groups (Figure 1).

Conclusions: Although fluconazole has a reduced susceptibility against P. marneffei in vitro, our study has demonstrated that once-weekly fluconazole is at least as effective as once-daily itraconazole as primary prophylaxis for systemic fungal infections in AIDS patients in northern Thailand.

Figure 1
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Antibody responses to hepatitis A virus vaccination in Thai HIV-infected children with immune recovery after antiretroviral therapy

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Background: HIV-infected children must take antiretroviral drugs for life, many of which are known to be hepatotoxic. Hepatitis A virus (HAV) vaccination in these children may be beneficial.

Methods: HIV-infected children aged >5 years, who had shown evidence of immune recovery (CD4>15%) for at least 3 months after receiving antiretroviral therapy (ART), were enrolled to be evaluated for Hepatitis A virus (HAV) immunity. HAV-seronegative children were given 2 doses of HAV vaccine 6 months apart. Antibody levels were determined using enzyme-linked immunosorbent assay (ELISA; VAXIZyme HAV ELISA test kit). Results: 98 children were enrolled. Mean age was 12.5±4.7 years. Prior to ART, 69% had a low stage of HIV disease, the mean CD4% was 5.7±4.6, and the mean plasma HIV RNA level was 5.4±0.6 log10 copies/mL. At enrollment mean CD4% was 30.0±6.1 and 97.5% (95/98) had viral suppression (<400 copies/mL). 88% (86/98) of children did not have protective antibody level (PAL) at enrollment. After the first dose of HAV vaccination, 69% (59/86) had PAL. All were low anti-HAV response with mean GMT of 46 mIU/mL. After the 2-dose HAV vaccination, 99% (85/86) of them had PAL. The mean GMT of children with seroconversion had high anti-HAV responses (>250 mIU/mL) and 34% (29/85) had low anti-HAV responses (20-249 mIU/mL).

Conclusions: Children with high antibody responses were younger (p=0.033), had higher CD4 cell count (p=0.02) and had higher rate of viral suppression (p=0.04) at enrollment compared to those with low antibody responses. Gender, clinical staging, ART regimen, CD4 cell count and viral load at ART initiation were not significantly different between the 2 groups. No serious adverse reactions were observed.

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Class I: HIV infection and Treatment

99
MOPE0205
Tuberculostasis positive among HIV-positive patients in AIDSRelief sites and Implications on Nigerian national strategy for isoniazid preventive therapy
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Background: Tuberculosis positivity of >10 mm is strongly suggestive of TB disease while values of 5-10 mm are common among healthy adults in high TB burden countries as a result of exposure to TB and widespread BCG vaccination. HIV induced immunosuppression blunts reactivity among patients exposed to TB, reducing the potential value of TST as a diagnosing tool in co-infected patients. This review aims at determining the pattern of reactivity to tuberculin skin testing (TST) among HIV-positive patients exposed to TB in 3 AIDSRelief (AR) supported sites in the Northern Nigeria.

Methods: A random selection of 100 HIV-positive patients identified for Isoniazid Preventive Therapy (IPT) at 3 Anti Retroviral Treatment (ART) facilities were done. Each patient had been free of opportunistic infections for >6 months, exposed to a case of active TB and was either on ART or not. In all cases, active TB was ruled out. All patients had TST with results recorded at 48-72hours and results were analyzed with CD4 counts.

Results: Forty percent four percent had CD4 counts < 350 cells/µL who had received ART for >9 months while 6% were awaiting treatment. The mean CD4 counts was 270 cells/µL. Result of TST < 5mm was found in 85% while 3% and 12% had TST <5 and >5mm respectively. Forty-seven percent (47%) and 53% of patients with TST values less than 5mm had CD4 counts < 250 and >250 cells/µL respectively. (p = 0.84).

Conclusions: These findings suggest a significant effect of HIV on delayed hypersensitivity reactions despite considerable immune reconstitution adequacy. TST is a reliable test to screen for TB infection in HIV-infected patients. This supports the inclusion of TST as a diagnostic tool in the diagnostic algorithm for TB in Nigeria as clinical and radiological diagnosis may be atypical in TB/HIV settings.

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MOPE0206
Correlates of immunological response to H1N1 adjuvant vaccine in HIV-infected subjects
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Background: A vaccine against H1N1 is reported the most effective tool for prevention of influenza in HIV-infected children. A single 7.5µg hemagglutinin dose was administered by intramuscular injection. Samples were obtained at baseline and 21 days after vaccination. The immunogenicity of H1N1 vaccine was evaluated with the use of a hemagglutination-inhibition (HI) assay. An HI antibody titer of 1:40 or higher was considered protective. Subjects who had a fourfold HI-antibody titer increase 21 days after vaccination were considered as responders.

Results: Overall, 36 HIV-positive subjects were enrolled (16% males, median age 45 years IQR 41-53). Median CD4 nadir was 222 cells/µL (IQR 64-723). At the time of vaccine administration, 92% of subjects was on HAART (58% PR-based and 33% NRTI-based). Median CD4 was 546 cells/µL (IQR 281-737), 17% had CD4 >350cells/µL and 92% had HIV-RNA< 50copies/mL. The geometric mean HI antibody titers (GMT) increased from 15.27 at baseline to 67.27 after 21 days: in particular a significant increase was observed in subjects with CD4>350cells/µL (from 28.67 to 189.50, p=0.004) but not in those with CD4<350 cells/µL (from 11.67 to 28.33, p=0.082). At 21 days, 75% of subjects had a protective antibody titer: this was more frequent in patients with CD4>350cells/µL. In those with CD4<350 cells/µL (83% vs 33%, p=0.024). CD4 nadir< 200cells/µL was independently associated to a lower probability of a fourfold antibody titer increase (OR 0.19, 95%CI 0.04-0.81, p=0.025).

Conclusions: After a single vaccination with 7.5µg dose, there was a substantial rise in HI-antibody GMTs in HIV-infected subjects although those with CD4<350 cells/µL would require a boosting dose. Subjects with CD4 nadir< 200cells/µL are at increased risk of non-response. Presenting author email: simona.giambedda@rma.unicatt.it

MOPE0207
Efficacy and immunogenicity of trivalent inactivated influenza vaccine (TIV) in HIV-infected children: a randomized, double-blind, placebo-controlled trial
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Background: Influenza vaccination is recommended for HIV-infected individuals. Data to support its effectiveness in HIV-infected children are lacking. This study evaluated the safety, immunogenicity and efficacy of TIV in HIV-infected children.

Methods: A randomized, double-blind, placebo, controlled trial (ClinicalTrials.gov, number NCT00883012) was undertaken in Johannesburg, South Africa in 2009. 411 HIV-infected children were randomized to two doses of TIV or placebo (normal-saline). Nasopharyngeal aspirates were obtained at illness visits and tested by RT-PCR for influenza viruses. Vaccine immunogenicity was evaluated by hemagglutinin antibody inhibition assay (HAI) in 90 children. Serocoversion was determined by a four-fold increase in titer after the 2nd immunization in baseline seropositive or a titer 1:40 in baseline seronegative participants.

Results: 406 children received two doses of vaccine as per protocol. Mean age at enrolment was 26.1 months (S.D. 14.3), median CD4 was 33.5% (range 15.2-59.7%) and 92% of children were on antiretroviral therapy. Seasonal influenza illness was confirmed in 16 of 205 fully vaccinated TIV recipients (14 H3N2 and 2 influenza B) for a vaccine efficacy of 7.7% (p=0.81). The intent to treat analysis, which included 21 episodes of seasonal-influenza virus in each group of children, also showed lack of vaccine efficacy (p=0.96). There were five additional episodes of H1N1-2009 pandemic Influenza infections in each group of children, which were excluded from the efficacy estimates. The numbers of vaccine and placebo recipients who seroconverted after the second dose of vaccine were 20 (48%) and 92% of children were on antiretroviral therapy. Seasonal influenza illness was confirmed in 16 of 205 fully vaccinated TIV recipients (14 H3N2 and 2 influenza B) for a vaccine efficacy of 7.7% (p=0.81). The intent to treat analysis, which included 21 episodes of seasonal-influenza virus in each group of children, also showed lack of vaccine efficacy (p=0.96). The numbers of vaccine and placebo recipients who seroconverted after the second dose of vaccine were 20 (48%) and 6 (13%) for H1N1, 25 (48%) and 6 (13%) for H3N2 and 16 (38%) and 0% for influenza B, respectively.

Conclusions: TIV was modestly immunogenic in HIV-infected children, but did not confer demonstrable protection against confirmed influenza illness, indicating the need for alternate strategies for protecting these children. Presenting author email: violari@imwede.co.za

MOPE0208
Incidence of HIV-related diagnoses before and after initiation of highly active antiretroviral therapy in children in LEO
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Background: Little is known about immune-reconstitution inflammatory syndrome (IRIS) in children.

Methods: LEGACY is a medical record review study at 22 US sites. We included HIV-infected subjects aged 0-25 years at enrollment with complete record abstraction from birth. We calculated the incidence (4100 patient-years) of AIDS-defining conditions (ADC) and selected HIV-related diagnoses (SHRD) in the six months pre- and post-initiation of the first HAART regimen.
for which there was a virologic response (i.e., ≥ 1 log\(_10\), decline in viral load within six months of HAART initiation). Follow-up for each ADC/SHRD was censored at time of diagnosis.

**Results:** Among 523 eligible enrollees who received HAART, 300 (57%) were responders, of whom 45 (15%) experienced an ADC/SHRD, 38 experienced a single ADC/SHRD, 5 experienced 2, and 2 experienced 3. Overall incidence of ADC/SHRDs was 16.9 (pre-HAART) and 20.3 (post-HAART) (P = 0.5).

A single ADC/SHRD, 5 experienced 2, and 2 experienced 3. Overall incidence of within six months of HAART initiation). Follow-up for each ADC/SHRD was

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is a phenomenon that can occur in children as well as adults.

**Conclusions:**

**Table 1: ADCs in HAART Responders Pre-/Post-HAART**

<table>
<thead>
<tr>
<th>ADC</th>
<th>No. Cases Pre-HAART</th>
<th>No. Cases Post-HAART</th>
<th>Incidence Pre-HAART</th>
<th>Incidence Post-HAART</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical cancer</td>
<td>0</td>
<td>1</td>
<td>0.7</td>
<td>0.7</td>
<td>0.24</td>
</tr>
<tr>
<td>Lymphocytic interstitial pneumonitis</td>
<td>1</td>
<td>1</td>
<td>0.7</td>
<td>0.7</td>
<td>0.98</td>
</tr>
<tr>
<td>Candidiasis, mucosal or invasive</td>
<td>4</td>
<td>1</td>
<td>2.7</td>
<td>2.7</td>
<td>0.15</td>
</tr>
<tr>
<td>CMV, disseminated</td>
<td>4</td>
<td>1</td>
<td>2.8</td>
<td>2.8</td>
<td>0.15</td>
</tr>
</tbody>
</table>

**Conclusions:** The increased pre-HAART incidence of some SHRDS (zoster; ITP, HSV) in this US cohort, though not statistically significant, suggests IRIS is a phenomenon that can occur in children as well as adults. Presenting author email: sxn9@cdc.gov

**MOPE0210**

**Immunopathogenesis and predictors of HCV immune restoration disease among HIV and HCV coinfected patients starting HAART**

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**Background:** The incidence and pathogenesis of immune restoration disease associated with HCV co-infection have not been assessed systematically. This was addressed here in HIV-HCV co-infected patients commencing HAART at an Indonesian clinic.

**Methods:** A cohort of 50 treatment-naıve HIV/HCV-coinfected individuals commencing HAART was investigated in the HIV Clinic of Ciptomangunkusumo Hospital, Jakarta, HCV-IRD was defined as increase of alanine amino transferase at least 5 times upper normal limit or 3 times baseline and 1 log\(_10\), decrease in HIV-RNA levels on HAART. Plasma levels of HCV-specific antibody, CXC10, sCD26, sCD30, IL-18, TGF-b1 and HCV-RNA were quantified regularly during 24 weeks of treatment. Bivariate analysis and linear mixed effect models were used to identify differences in these plasma markers and HCV-RNA. Logistic regression was used to define predictors of HCV-IRD.

**Results:** The incidence of HCV-IRD was 9.2 per 1000 person years, with a median onset at 4 (min-max 1-2) weeks. The marker of immune recruitment to the liver (CXC10) was increased in IRD patients. Markers of T cell activation (sCD26 and sCD30) were generally increased during HCV IRD. Total anti-antibody was consistently lower in patients who developed HCV IRD (p<0.001), but anti-HCV core antibody did not show this pattern. No significant difference of changes in HIV-RNA were observed between HCV IRD patients and controls but levels increased on HAART in most patients. Low baseline levels of total anti-HCV antibody (correlating with elevated HCV-RNA) and absolute CD4\(^+\) T-cell counts were the best predictors of HCV IRD (area under ROC curve = 0.859, sensitivity 88.9% and specificity 82.9%).

**Conclusions:** High levels of baseline total anti-HCV antibody protect may against HCV IRD by reducing in HCV antigen load before HAART. T-cell dependent mechanisms are implicated in HCV IRD, since many patients exhibited rises in sCD26, sCD30 and CXC10.

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**MOPE0211**

**Incidence and risk factors for TB-IRIS in HIV-positive patients in North India**

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**Background:** Immune Reconstitution Inflammatory Syndrome (IRIS) is an important cause of morbidity and mortality in patients with HIV disease who are initiated on anti-retroviral therapy. This is particularly relevant in resource poor countries where the prevalence of opportunistic infections is high. Most previous studies on IRIS have been done retrospectively. We have done a prospective study about the incidence as well as risk factors of IRIS in HIV patients.

**Methods:** 150 HIV-positive patients were enrolled into a prospective cohort monitored monthly for 48 weeks for the development of TB-IRIS. Clinical workup, PPD test, X Ray chest, ultrasonography abdomen, CD4 count were done baseline.

**Results:** The patient population had 77.3% male, mean age 45.5 yrs, and mean CD4 count 131.5/cmmm. 17 patients (11.3%) developed TB-IRIS within a period of 48 weeks. The median interval in developing IRIS was 75 days. The clinical forms of TB-IRIS were tuberculosis meningitis, generalized lymphadenopathy, and disseminated tuberculosis. Three patients died of IRIS complications. The mean CD4 count was significantly lower in those who developed IRIS than in those without IRIS (86.29+/−54.5, 138.2+/−77.5, p=0.003). Patients who developed IRIS had significantly lower Hb level (8.7+/−2.2, 10.3+/−2.0, p=0.001). The presence of hepatosplenomegaly and abdominal lymphadenopathy on ultrasonography and PPD positivity at baseline was significantly (p=0.001) associated with the development of IRIS.

**Conclusions:** In this prospective study, the incidence of TB-IRIS was 11.3% in one year follow up. The risk factors associated with the development of TB-IRIS were low CD4 count, low Hb level, PPD positivity, and the presence of hepatosplenomegaly and abdominal lymphadenopathy on ultrasonographically at baseline. Our findings suggests the need for meticulous work up of patients for the evidence of TB at the baseline before ART initiation, particularly in countries where the burden of TB is high.

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MOPE0212

NK cell degranulation level predicts immune reconstitution inflammatory syndrome (IRIS) in patients co-infected with HIV-1 and tuberculosis: results from the ANRS 12153 study

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Background: This project aimed to determine the involvement of the Natural Killer innate response, in the onset of the IRIS in HIV/TB co-infected patients recently treated for both infections. We also aimed to identify immunological markers that could predict the occurrence of IRIS in these patients.

Methods:

i) 138 HIV/TB co-infected patients enrolled in the Camelia trial (ANRS12153-CIPRA/KH001-DADDS-ES D10245) in Cambodia.

Results: 37/138 HIV+/TB+ patients developed IRIS. At baseline, 33 IRS and 67 non-IRS patients were available for the analysis of degranulation activity and IFNγ production and 34 IRS and 78 non-IRS patients for repertoire analysis. Degranulation activity was significantly higher in IRS than non-IRS patients (p=0.02 and 0.05, respectively). CD170+ IFNγ-NK cells were also higher in IRS patients (p<0.005) while IFNγ secretion was similar between the two groups of patients. At time of IRIS, expression of NK46 and NKDG2 among NK cells was lower in IRS patients compared to non-IRS matched patients (p=0.04 and 0.01, respectively) but degranulation activity or IFNγ secretion was different between the two groups. NK degranulation level at baseline was the most important factor associated with IRIS (hazard ratio (95% confidence interval): 4.41 (1.60-12.16) for CD170+NK cells and 2.80 (1.06-7.37) for CD170+IFNγ- NK cells).

Conclusions: NK degranulation level can predict the occurrence of IRIS in HIV/TB co-infected patients. Further research is needed to point out the role of innate immunity in the pathophysiology of IRIS.

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MOPE0214

The effects of exercise training on metabolic and morphological outcomes for people living with HIV: a systematic review of randomised controlled trials

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Background: Exercise may improve strength and endurance for people living with HIV (PLWH) however, its effects on metabolic and morphological complications are unclear.

The aim of this review was to determine the effects of exercise for PLWH on metabolic and morphological outcomes.

Methods: A search of MEDLINE, CINAHL, EMBASE, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Physiotherapy Evidence Database (PEDro), Sports Discuss and Informit was conducted from 1980 until November 2009. Randomised controlled trials (RCT) comparing aerobic exercise (AE) or progressive resistive exercise (PRE) or combined AE and PRE with no exercise or another exercise intervention, performed at least twice weekly and lasting at least four weeks among HIV infected adults were included. Two reviewers completed data extraction and quality assessment independently, using the PEDro scale. Statistical analyses involved examining differences between

Results:

(a) Exercise versus controls or (b) Exercise versus another form of exercise.

Conclusions: Few RCTs exist evaluating the effects of AE, PRE or combined AE and PRE in isolation improve certain morphological outcomes however, these effects along with metabolic outcomes need further review. More emphasis is needed on improving trial quality and including metabolic outcomes such as blood lipids, glucose and bone density outcomes.

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MOPE0215

Perceptual differences between providers and PLWHA on complementary and alternative medicine

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Issues: Complementary and alternative medicine (CAM) is a provocative, if not confusing, approach to HIV care among healthcare providers and consumers. There are relatively few opportunities for HIV healthcare providers to discuss CAM with one another. Also there has been little information released regarding U.S. government investments in CAM clinical trials and little consumer awareness of the extent of research being done. Providers must be able to explain the impact of CAM practices on patients.

Lessons learned: PLWHA largely direct the conversations on CAM in the providers’ office and they obtain their CAM information from sources other than their provider. Further, there is confusion on the part of the providers and PLWHA about CAM, specific to what CAM is and how it can benefit/impact HIV care and treatment. Among PLWHA, CAM is used across all stages of disease progression. Among providers, there is an aversion to discussing CAM unless it is brought up by patients.

Next steps: Consumer education on CAM usage is essential. Healthcare providers must also increase their capacity to converse with their patients about CAM, particularly as more information about HIV-related CAM trials is released. Healthcare providers must be able to explain the impact of CAM practices on patients and their outcomes.

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Complementary and traditional medicines and the role of traditional healers in therapy

MOPE0213-MOPE0215

Ethnomedical survey of medicinal plants used as remedy for HIV/AIDS related infections by the traditional medicinal practitioners of Bangladesh

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Background: Bangladesh is still considered as a low HIV/AIDS infected countries prevalent country. Traditional medicinal practitioners in Bangladesh are very often the first medical contact; particularly in the rural areas. There are several types of traditional medicinal practitioners according to their means of practice like spiritual practitioners, herbalists, bone-setters, and traditional birth attendants. Herbal practitioners and traditional birth attendants are recognized by the government of Bangladesh, after receiving training from an approved institution. Other traditional methods are widely practiced in the country; though not acceptable by the law.

The current study was to conduct an ethnomedical survey among the traditional medicinal practitioners of Bangladesh to learn about medicinal plants used to treat HIV/AIDS related infections.

Methods: Ethnomedical data were collected using semi-structured interviews, field observations, preference and matrix ranking with traditional medicinal practitioners. All medicinal plants were identified and vouchers were stored at the Bangladesh National Herbarium; under the first author’s collecter’s box.

Results: In the current study; 83 medicinal plant species belonging to 72 genera and 59 families were found to be used to treat one or more HIV/AIDS related infections in Bangladesh. Regarding HIV/AIDS related infections, many people think that using modern medicine is of no use; rather using traditional medicine or spiritual effects can help in this case. All of them mentioned that good relationship and trustworthiness with local people are the main strength of their practices. Many people in the country still have faith on traditional medicines and the role of traditional medicinal practitioners.
**MOPE0216**

**Effectiveness of a PMTCT programme in rural Western Kenya: the experience of Médecins sans Frontières**

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**Background:** We aim to assess the coverage of the Prevention Mother-to-child (PMTCT) programme in the last trimester for mother-child transmission according to the pharmacological intervention received by mothers and babies attending ANAC Care Clinics (ANC) from 1st of January 2006 to 31st of December 2008.

**Methods:** The coverage of the programme was estimated as the proportion of mother-baby pairs receiving any ARV regimen among all HIV-positive women attending ANC services. To estimate mother-to-child HIV transmission risk (MTCT), a cohort of children exposed and unexposed to different pharmacological interventions born to HIV-positive mothers was created as follows: 1) Complete protocol: ARV prescribed according WHO recommendations, 2) Partial protocol: does not meet criteria for complete protocol; 3) No intervention: ARV were not prescribed to both mother and child. To assess the HIV status of exposed babies, they were tested using DNA PCR at six weeks of life and six weeks after breastfeeding ceased.

**Results:** Between the period of the study, 22,566 women accepted HIV testing; 1,668 were HIV-positive (7.4%; 95%CI: 7.05-7.73); 1036 (62%) were registered in the programme and 632 were lost to follow up. The programme coverage was 40.4% (95%CI 37.9-42.7) Out of 767 newborns, 28 died (3.7%), 148 (19.2%) defaulted, 289 (37.7%) did not complete the follow up while 302 babies did so, of these, 42 were HIV-positive; overall MTCT risk was 13.9% (95%CI: 9.8-17.9); 2.5% in the 79 receiving complete protocol, 2.8% group 1; 1.9% group 2, 17.2% group 3 (p=0.001). Overall mortality rate stood at 1.8%; 0.9% in group 1 and 2, 3.3% in group 3 and 9% in group 4 and 30% were lost in follow up.

**Conclusions:** Our data show a good level of enrolment but low global coverage rate. However it demonstrates that ARV regimes can be implemented in low resource rural settings with marked decreases of MTCT. To increase the coverage of PMTCT programmes remains the main challenge.

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**MOPE0217**

**KZN IMPACT 2009: determining the impact of the program for prevention of mother-to-child transmission of HIV (PMTCT) on HIV transmission rates in KwaZulu-Natal, South Africa**

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1University of KwaZulu-Natal, Centre for Rural health, Durban, South Africa, 2World Health Organization, Child and Adolescent Health and Development, Geneva, Switzerland

**Background:** Evaluations of prevention of mother-to-child transmission (PMTCT) programmes frequently focus on uptake of services and outcomes among PMTCT participants. We report results from a large population based surveillance study conducted to determine coverage of PMTCT interventions, and rates of mother-to-child transmission of HIV (MTCT), in KwaZulu-Natal (KZN), South Africa.

**Methods:** Data was collected in immunisation clinics of all 347 primary health care clinics in 6 districts of KZN from May 2008 to April 2009. All mothers attending with babies aged 4-8 weeks were eligible to participate. 8001 mothers were interviewed to determine coverage of PMTCT services, and dried blood spot (DBS) samples were collected from their babies. DBS samples were tested at a centrally HlV accredited lab for HIV exposure, and for HIV PCR to determine HIV infection.

**Results:** 7879 (98.5%) mothers reported ever having an HIV test. 7115 (90.3%) reported testing in their recent pregnancy, of whom 5441 (68.0%) were tested in the last trimester. 3212/7879 (40.8%) reported testing HIV-positive, of whom 65.3% received a CD4 result during their pregnancy. Of 485 women reporting a CD4 ≥ 200, 315 (64.9%) started highly active antiretroviral treatment (HAART) during their pregnancy.

The MTCT rate was 7.0% overall, but varied according to the PMTCT regimen the mother received. MTCT was 13.5% among those women who received nevirapine alone, 5.6% among those who received AZT and nevirapine, and 5.0% among those on HAART.

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**MOPE0218**

**Effectiveness and shortenings of an antiretroviral (ART) multi-drug protocol to reduce mother-child transmission of HIV in the Djourougo urban health district in Yaounde, Cameroon**

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**Background:** Antiretroviral multidrugs protocols for prevention of mother-to-child transmission (PMTCT) of HIV are currently recommended in Cameroon following WHO2006 guidelines, however the uptake is still low.

**Objective:** To measure effectiveness of an antiretroviral multidrug protocol in the routine PMTCT program in Djourougo health district (highly active antiretroviral therapy (HAART) for treatment of CD4cell count ≤ 350/mm3, and prevention above Z = X-tudovime from 28 weeks and single dose Nevirapine at labor).

**Methods:** Prospective cohort of babies born of HIV-1-infected mothers, screened for HIV by RNA-PCR between 6 weeks-6months and classified with a composite criteria according to the period and the duration of the antiretroviral treatment. Group 1: antepartum (AP), intrapartum (IP) and post partum (PP) antiretroviral therapy for treatment of AP, IP, and PP lasting: one month or more / group 2: AP-IP-PP antiretroviral therapy for prevention with AP lasting one month or more / group 3: incomplete duration of treatment or prevention, group 4 no ART. For effectiveness we considered early rate of HIV-transmission and mortality rate at 6 months in each group.

**Results:** 400 mother-baby pairs included, 90% born by vaginal delivery,70.5% bottle fed. Group 1 (N=116, 39%), group 2(N=141, 35.3%), group 3(N=87, 21.8%), group 4(N=64-4%), Median Maternal CD4 count Group 1=263, group2=572, group 3=487 group 4=293, mean duration of ART: 90 dys group 1, 65 dys: group 2, overall HIV transmission rate stood at 5.7%. 2.8% group 1; 1.9% group 2, 17.2% group 3 (p=0.001). Overall mortality rate stood at 1.8%; 0.9% in group 1 and 2, 3.3% in group 3 and 9% in group 4 and 30% were lost in follow up.

**Conclusions:** Antiretroviral multidrugs protocols for PMTCT can succeed in urban health district of low resource settings though 25.8% babies who are still missing appropriate regimen and / or duration are at higher risk of mother-to-child HIV transmitted infection or early death.

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MoPE0220
Knowledge and attitudes of Omani pregnant women towards HIV/AIDS
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Background: Vertical (mother-to-child) transmission (MTC) of HIV is the ma-
jor route of HIV transmission globally. In Oman, the estimated number of people living with HIV/AIDS is 3854 cases with a low prevalence rate of < 0.01% of the population. The knowledge and attitudes of Omani HIV+ women is not known. The aim of this study is to investigate the knowledge of HIV/AIDS among Omani pregnant women, their perception of risks, risk behav-
iours and management and their attitudes towards HIV screening.

Methods: Two hundred pregnant women participated in this study (average age of 20 ± 2 years). A questionnaire was used to determine the knowledge and attitudes of pregnant women towards maternal and infant health, prevention and management of HIV/AIDS.

Results: Omani pregnant women showed reasonably good knowledge about HIV/AIDS. All participants have heard about HIV/AIDS. The participants knew that sexual contacts (88%) and injection drug use (97%) are the main routes of HIV transmission. Women had low knowledge about MTC transmission, only 27.6% of the participants knew that HIV can be transmitted during labor and only 22.2% of the women knew that there are means to reduce MTC HIV transmission. The majority of the women (72.9%) knew that HIV can be transmitted during birth. Approximately one third of the participants prefer mandatory HIV testing.

Conclusions: Although Omani pregnant women had some knowledge about HIV/AIDS, there is still lack of solid knowledge of preventing HIV transmission from an infected mother to her baby. An effective way for reducing vertical transmission of HIV is to educate pregnant women about the virus. Voluntary counselling and testing is a key point in the initiation of programs to reduce HIV infection in Oman. Presenting author email: m006490@squ.edu.om

MoPE0221
Pregnancy outcomes among HIV-infected women with advanced WHO stages of HIV disease
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Background: Pregnancy outcomes in women with advanced WHO stages of HIV (WHO stage IV) is poorly researched globally. The main aim of the study was to determine the pregnancy outcomes among HIV-infected pregnant women in Ukraine. The pregnant women were divided into three groups: Group I (n=120) had WHO stage IV; Group II (n=150) had WHO stage I and Group III (n=150) had WHO stage II. Variables with a significance level of P < 0.05 were considered for the logistic regression (LR) analysis.

Results: At the 36-37 week gestation were lower in the first and second groups. The median HIV-RNA levels before delivery were significantly higher in the first group (p<0.001) than in the second and third groups. Undetectable viral load was only in 20.8% women of the third group. The highest frequency of anemia (Hb < 9 g/dl) was noticed in the group. The occurrence of premature birth (gestation <37 weeks) was higher above (p<0.001) in the first and second groups than in the third group. Low birth weight (<2500 g) was highest (p<0.001) in the first group (77.8%). MTC rate (in the 6 months) was: 7.5% in the PMTCT group; 18.6% in the HAART group and 33.3% in the first group. We had no cases of infants and mothers mortality.

Conclusions: Pregnant women with advanced WHO stages of HIV-infection with HAART before or at the early term of counseling and testing had significantly lower rates of poor pregnancy outcomes and the highest rate of MTC. Presenting author email: sps0705@ukr.net

MoPE0222
Reasons why women default from a prevention of mother-to-child transmission (PMTCT) program in the informal settlement of Kibera, Nairobi, Kenya: results from a qualitative study
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Background: Kibera is an informal settlement in Nairobi with overcrowded and impoverished living conditions. In 2006 the Kenyan Ministry of Health and Medecins Sans Frontieres integrated free prevention of mother-to-child trans-
mission (PMTCT) services into antenatal care (ANC) at two primary health care clinics in Kibera. After one year 43% of women who enrolled in PMTCT at first ANC visit had defaulted. This qualitative study aimed to explore reasons why women default from PMTCT after testing HIV+ at their first ANC visit.

Methods: Data were analyzed from 17 focus group discussions and 17 in-
depth interviews with six stakeholder groups that included women, men, and PMTCT service providers. Using a grounded theory approach, four researchers coded the data, identified key themes, and developed a conceptual frame-
work.

Results: Seven themes emerged from the data that facilitated and/or pre-
vented adherence to PMTCT: 1) an unsupportive environment for health in Kibera, 2) relationships and gender roles, 3) knowledge and beliefs of women about the risk of MTCT, 4) knowledge of MTCT, 5) disclosure of HIV status, 6) male partner support for PMTCT, and 7) service delivery. Testing HIV+ during pregnancy triggered a dynamic risk assessment of perceived hazards in the home, community, and clinic environments that could occur as a result of PMTCT participation. Men influenced this risk assessment, but were generally unaware of clinic-based PMTCT activities. To preserve relationships with male partners, meet expecta-
tions of womanhood, and maintain confidentiality, women had to continuously balance the hazards and benefits of PMTCT adherence.

Conclusion: Home, community, and clinic-based hazards associated with participation prevented many women in Kibera from adhering to PMTCT. Men played a significant role in women defaulting from PMTCT. Community-based HIV testing and PMTCT education, male involvement in ANC, and counseling customized to assist each woman in her risk assessment, may create environ-
ments more conducive to PMTCT adherence.

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MoPE0223
Perinatal transmission of HIV-1 in a resources limited population from Buenos Aires city, Argentina: impact ofantenatal care, pregnancy, and birthing variables on PMTCT adherence
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Background: Perinatal transmission (PT) is the main cause of pediatric HIV- infection in Latin America. Identification of variables associated with PT is of importance to improve local policies for preventing mother-to-child transmis-

Methods: Data regarding HIV+ pregnant women (HPW) and their newborns assisted at the “Comerde Argenche” Hospital, Buenos Aires city (CABA), Argen-
tina were prospectively collected (period 1998-2008). Univariate analyses were done to identify significant variables with PT (table 1). Variables with a significance level of p < 0.05 were considered for the logistic regression (LR) analysis.

Results: We evaluated 357 mother-child binomium. Overall perinatal trans-
mission: 3.2%. Univariate analyses are detailed in table 1.

MoPE0224
Experience and outcome in usage of extended PPTCT protocols in South India
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Issues: The feminisation of HIV epidemic in India is reflected in monogamous housewives becoming HIV infected and being at-risk of delivering HIV infected babies. Parent-to-child transmission accounts for 4% of HIV infections in In-
dia. Of the 27 million annual pregnancies, 189,000 occur in HIV-positive wom-
ens. At a transmission rate of 5%, 9,450 HIV-positive babies will be born annually. In 2006, only 10% of pregnant mothers received PMTCT services.

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We describe the PPTCT experience of an NGO in partnership with 24 private-sector mission hospitals in four South Indian states from 2003-2009.

Description: Mothers of HIV-exposed infants were offered counseling of whom, 63,600 (94.8%) agreed to confidential testing. 389 women tested HIV-positive indicating a maternal HIV-prevalence of 0.6%. Among them, 51 were lost to follow-up or referred, 24 had abortions or stillbirths, 20 are awaiting delivery, and 294 had live births. Of these, 27 received HAART, 143 ZDV, 61 NVP, and 21 no ARV treatment. Treatment was based on gestational period at diagnosis, availability of CD4 counts and WHO recommendations at the time.

Of the 294 live births, 95.9% received ARV drugs. Only 4 babies were breastfed. Of the 214 newborns tested, 9 were positive. The risk of transmission reduced from 30% to 2.3%. Of the positive babies, 3 mothers received ZDV, one 19 days ZDV and one ZDV-NVP, and one received 9 weeks of ZDV and one no ARV-NVP. None of these babies were breastfed.

Lessons learned: Judicial, complex PPTCT regimes are possible in India, resulting in significant reduction in vertical transmission. Parents have to be integrated in ARV-Programs to be able to take care of their children.

Next steps: PPTCT services in India should be rapidly up-scaled with wider choices than present policy of ZDV-NVP. ARV regimes during breast feeding need to be incorporated to bring down the infant mortality rate.

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MOPE0225
Decision about mode of delivery can be safely based on viral load one month before delivery


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Background: Measures to prevent mother-to-child transmission (PMTCT) of HIV in Brazil were implemented since 1988. The success of PMTCT depends on the proper management of ARV administration, and the prenatal care management is a key component. Elective Cesarean section is currently indicated for PMTCT in women with viral load (VL) > 1000 copies/ml because of increased transmission during vaginal labor due to contact of the fetus with maternal secretions or blood or prolonged rupture of membranes. However, C-section is associated with increased risks of maternal and infant morbidity, mainly in developing countries. Since ante-partum VL is determinant to indicate mode of delivery, a reliable time point to assess it is essential to guide the decision.

Methods: From 01/2007 to 08/2009, 179 HIV pregnant women under HAART were selected for antenatal support at a center for PMTCT in Rio de Janeiro. VL was measured at weeks 34-37 to decide mode of delivery and again within 7 days post-delivery, in cases in which the elective cesarean was performed using this VL cut-off. A 5% significance level was chosen. Positive Predictive Value (PPV), overall agreement, and Cohen kappa (k) of pre-delivery cut-off of < 1000 copies for VL were calculated in relation to immediate post-delivery VL cut-off of < 1000 copies.

Results: When cut-off values of < 1000 for immediate post-delivery VL were concerned, < 1000 cut-off pre-delivery values had a PPV of 93.8% (C 95% 89.7-98.9) of women with immediate post-delivery VL < 1000 copies. The overall agreement of pre-and post-delivery VL was 95.9% (CI 95% 93.8-98.7). The median interval between pre-delivery VL and delivery was 29.5 days.

Conclusions: VL measured one month pre-delivery can predict VL control at delivery in 93.8% and obstetrical decision about mode of delivery can be safely based on that value.

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MOPE0226
Prevention of mother-to-child transmission of HIV in Viet Nam, achievements and difficulties - lessons learned from a program evaluation in three provinces

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Issues: Vietnam HIV epidemic remains focused in high risk group. The HIV prevalence among pregnant women estimated 0.25%, but inconsistently in the whole country so that PMTCT resources have been mostly focused in high prevalence area. In the current situation, urban area in which to reach most women. However, accessibility, follow up and overall impact of the program have been a concern.

Description: We performed a program evaluation of 4 large PMTCT sites that have been ongoing since 2005 by assessing implementation, successes and challenges. Using a standardized form, data was collected from the HIV pregnant women records and in whom the HIV status of the infant has been determined.

Since 2005, over 400,000 pregnant women have received HIV testing and 1,203 (0.3%) were diagnosed with HIV. Of 1,152 HIV infected pregnant women who delivered their babies, 1,014 (88%) had received ARV prophylaxis (of different regimens) within 72 hours after birth and 41% ARV were calculated in relation to immediate post-delivery VL cut-off of < 1000 copies.

Lessons learned: We successfully referred patients to pediatric program for further follow up. 255 babies (45%) had their HIV status confirmed, by PCR if less than 18 months old or by ELISA if over. Of those 233 newborns tested, 133 (57%) were HIV-negative and 22 (8.6%) were HIV-positive.

Use of resources faces unique challenges and improving access, initial testing and adequate follow up care and testing need improvement.

Next steps: Despite working with the programs to identify ways to improve access as well as follow up care, PCR testing has very recently been expanded in Vietnam, starting the time to diagnose which should improve follow up.

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MOPE0227
Innovative strategies to increase involvement in PMTCT services


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Background: Rising incidence of HIV in women in Sub Saharan Africa translates to increasing risk of mother-to-child transmission (MTPCT) of HIV. There is a need to improve adherence to PMTCT services in the region. Among other activities, NUMAT facilitated the creation of AIDSRelief national performance indicators shows low male involvement at the ANC, evidenced by poor uptake of partners testing (of 7% program-wide). There should be active involvement of the male partner in the ANC and partners counseling, testing and notification in order to scale up male involvement and partner testing at the ANC.

Methods: A prospective study was done in the south eastern part of Nigeria, to monitor the effect of different interventions in improving partners testing in pregnant women attending ANC.

Results: Partner testing was scaled up from 12% regionally to 46% over a 5 months review period. 4% of the partners were tested and 0.4% discordant couples identified. 78.7% disclosed at the ANC clinics (an increase from 0%). Additionally there was increased-disclosure amongst couples and improvement in Positive behaviors toward pregnancy and health services.

Conclusions: Efforts aimed at engaging male partners in ANC (e.g. Partner Slips, couples forum) can be effective approaches to increasing male involvement in ANC and reducing MTCT and improving quality of care for PMTCT patients.

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MOPE0228
Challenges in implementation of recommended feeding options among HIV-positive mothers in Northern Uganda

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Issues: Infant feeding is a crucial factor in determining growth and development of a child. But the risk of HIV transmission during breastfeeding poses a dilemma for infant feeding, particularly in northern Uganda a region where the HIV prevalence of 8.2% is higher than the national average. The Ministry of Health’s policy document outlines recommendations on infant feeding for HIV-exposed babies. However, little is known about mothers’ perceptions and challenges in implementing them.

Description: Northern Uganda Malaria AIDS Tuberculosis Program (NUMAT) is a USAID-funded program improving uptake and utilization of PMTCT services in the region. Among other activities, NUMAT facilitated the creation of Family Support Groups (FSGs) attached to PMTCT facilities. FSGs, among other things, assist HIV-positive mothers in making informed decision about current feeding options. NUMAT organized Family Group Discussions (FGDs) in 6 health facilities to collect pregnant mothers’ experiences about this issue.

Lessons learned: 45 PMTCT mothers whose babies were older than six months participated. Mothers’ knowledge about feeding options was adequate and they recognized the role of the FSG in providing useful information. Majority of the mothers recognized exclusive breastfeeding (EBF) but it was a better nutritional option for their babies; some did it for cultural motives and others for financial reasons. But they mentioned exclusive breastfeeding as the major feeding issue parents face as challenges. Mothers who chose replacement feeding or mixed feeding reported loss of breast-milk and disease occurrence to have determined their choice. Some discussed parents reported some pressure from communities and families to choose EBF, while most of them found replacement feeding feasible and acceptable but hardly affordable. Eventually, one third of mothers practiced a mixed feeding approach.

Next steps: Despite recommended feeding options, a remarkable proportion of mothers still practices mixed feeding that is associated with higher HIV transmission. Alternative PMTCT strategies should be sought to address this situation.

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MOPE0229  Practices of offering a child prechewed or orally prewarmed food: the NISDI perinatal (LILAC) cohort in Latin America

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Method: A subset of HIV-infected pregnant women and site investigators in Latin America were interviewed about feeding practices. The interview tool included questions about prechewing and prewarming food as part of the feeding practices, knowledge and practice of prechewing and prewarming infant foods, and any barriers to the feeding practices. The responses were analyzed qualitatively using a grounded theory approach.

Results: The practice of prechewing infant foods, a risk factor for HIV transmission, was observed in all sites across six Latin American countries. The prevalence of prechewing varied by country, with the highest prevalence reported in Argentina (58%), followed by Brazil (39%), Peru (29%), and the United States (17%). The practice of prewarming food was less prevalent, with 12% of respondents reporting this practice. The barriers to prechewing and prewarming food included cultural practices, lack of knowledge, and access to resources.

Conclusions: The practice of prechewing and prewarming food is a significant risk factor for HIV transmission among HIV-infected pregnant women in Latin America. Further research is needed to understand the factors influencing these practices and to develop strategies to prevent their transmission.
low. Healthcare providers’ individual attitudes are assumed to influence the quality of delivered services, and contraceptive provider dispositional may con- stitute an obstacle for partner participation. The aim of this study was to analyze provider attitudes on partner involvement in PMTCT interventions, in order to develop strategies improving PMTCT service quality for both mem- bers of a couple.

Methods: A hundred interviews based on a semi-structured questionnaire were conducted with PMTCT providers (84 female, 11 male) in Mbeze Re- gion, Tanzania. Questions targeted opinions on partner participation in PMTCT interventions, experiences with integrating men, and links between PMTCT service attenders had in their private lives. Expressed att- itudes and reported behaviors were compared inter-and-intrapersonally and tested for differences in various subgroups.

Results: Approval of partner integration into PMTCT services was high at 80%, and not significantly linked to providers’ parenthood status or sex. However, among those providers with a parenthood status, only a third had attended PMTCT services with their partners in private life. Personally experi- enced partner attendance and approval of partner involvement in PMTCT were significantly associated (p=0.05) in the parent group. From those 99% of providers stating that their health facility would actively support partner involvement, 38% nonetheless declared that no partners attended their serv- ices.

Conclusions: Although the overall position of PMTCT providers towards male involvement seems to be beneficial, the divergence between theoretical ap- proval and self-reported behavior raises a query on the perpetuation of expressed attitudes. Health facilities should strengthen providers’ positions towards partner involvement by communicating clear policies and guidelines, and by encouraging partner service attendance among providers themselves to make it a normal aspect of both individual experience and professional routine.

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MOPE0234
Integrating and expanding PMTCT into the rural health care system in Guangxi province, Southern China

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Background: In 2009, China estimated 740,000 people were living with HIV/ AIDS; of these, 81% were women, 19% men. From 2003, free counseling, testing and treatment have been available to HIV- positive pregnant women and their newborns. However, national coverage of prevention of mother-to-child transmission services remains below 25%. In an effort to increase especially rural PMTCT coverage, links between antenatal care (ANC) and HIV/AIDS care and treatment services in Guangxi province were strengthened.

Methods: In rural villages, counties and townships, ANC clinics run by Maternal Child Health (MCH) Department adopted a routine, opt-out approach to testing pregnant women for HIV/AIDS. Women testing positive were provided medical care and treatment. Additional follow-up services were provided by county-level quality control China Center for Disease Control (CCDC). Close communication and reim- bursement mechanisms were established between the three health care de- liveries.

Results: From November 2006 until August 2009, PMTCT services were ex- tended to 112 clinics and hospitals where 233,017 (88%) pregnant women received HIV testing. HIV prevalence was 0.2%, with 455 pregnant women testing HIV-positive and 395 (87%) receiving antiretroviral (ARV) prophylaxis. Of these women, 373 (95%) accepted ARV treatment (2 INTR+Nevirapine: 55%; 2 INTR+PI: 32%). Nelfi navir was the most frequently PI used (47/65; 72%). Intrapartum ARV was administered to all pregnant women. The majority were given ARV treatment before delivery (65%; 81% had record of PMTCT services remained to be acknowledged). Over 32% had congenital defects and 9% NC. Overall neonatal mortality: 2.2%; perina- tial mortality: 1.8%.

Conclusions: By integrating PMTCT services into the existing three-tier health care system, we achieved high PMTCT coverage in rural Guangxi province, Southern China. We plan to further expand this model for comprehensive PMTCT care and treatment services for HIV-infected women and their families to other rural and ethnic minority areas with relatively high HIV prevalence.

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MOPE0235
Maturation of the prevention of mother-to-child transmission (PMTCT) programme in Northern Tanzania

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Background: The PMTCT programme was introduced in Tanzania in 2000. Since then, it has expanded country wide and been scaled-up. The aim of the present study was: 1) to assess the programme after the implementation of an evaluation study on PMTCT knowledge, 2) to explore the integration of mothers’ knowledge of PMTCT; and 3) to assess the quality of the counselling given.

Methods: The study was conducted in 2009-2010 in rural and urban areas of Moshi, Kilimanjaro region, Tanzania. Mixed methods were used. In the quan- titative part we interviewed 446 mothers coming for immunisation with their four weeks old infants at five reproductive and child health clinics. The urban clinics included in the study had on average implemented the programme two years earlier than the rural clinics. We compared inter-and-intrapersonally and tested for differences in various subgroups.

Results: Approval of partner integration into PMTCT services was high at 80%, and not significantly linked to providers’ parenthood status or sex. However, among those providers with a parenthood status, only a third had attended PMTCT services with their partners in private life. Personally experi- enced partner attendance and approval of partner involvement in PMTCT were significantly associated (p=0.05) in the parent group. From those 99% of providers stating that their health facility would actively support partner involvement, 38% nonetheless declared that no partners attended their serv- ices.

Conclusions: Although the overall position of PMTCT providers towards male involvement seems to be beneficial, the divergence between theoretical ap- proval and self-reported behavior raises a query on the perpetuation of expressed attitudes. Health facilities should strengthen providers’ positions towards partner involvement by communicating clear policies and guidelines, and by encouraging partner service attendance among providers themselves to make it a normal aspect of both individual experience and professional routine.

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MOPE0236
Male involvement in prevention of mother-to-child transmission (PMTCT) programmes in Northern Tanzania

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Background: The aim of this study was to explore the male partners’: 1) in- volvement in the PMTCT programme and; 2) potential influence on the moth- ers’ utilisation of the programme.

Methods: This study was conducted in 2007-2008 in Moshi, the Kilimanjaro region, Tanzania, eight years after the first introduction of the PMTCT programme in this area. We utilised mixed methods. In the quantitative part we interviewed 446 mothers coming for immunisation with their four weeks old infants at five reproductive and child health clinics. Additionally we conducted five focus group discussions with fathers and four with mothers. We also car- ried out 19 in-depth interviews: eleven with male partners in families where wife and husband were interviewed separately.

Results: Every mother, 417/446, was interviewed. In 315/446 cases testing the antenatal clinic accepted. All fathers, 327/327, who were asked, agreed that their part- ners were tested. The fathers had a positive attitude towards testing for HIV in general, but were reluctant to test at the antenatal clinic themselves due to the following: 1) perceived stigma; 2) unnecessary; 3) female arena; and 4) female responsibility. Women commonly expressed lack of power to make their partner go for HIV testing and to protect themselves from HIV. Condoms continued to be associated with extramarital affairs, and were by most men not considered acceptable within a marital union. Further, the fathers would not accept early weaning or not breastfeeding without been given a reasonable explanation.

Conclusions: The male partners in this study were supportive of their wives’ participation in the PMTCT programme, but continued to resist couple coun- seling and testing in the antenatal clinic, and condom use during pregnancy and the breastfeeding period. Male involvement is a prerequisite for successful preven- tion of MTCT and renewed efforts to make PMTCT services family friendly are urgently needed.

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MOPE0237
Neonatal outcomes after perinatal exposure to HIV-1 in Argentina

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Background: Argentinian data regarding perinatal transmission, preterm birth (PB), congenital defects, neonatal complications (NC) and mortality among infants in utero exposed to HIV-1 are limited. These outcomes are the aim of this study.

Methods: Retrospective analysis of medical charts of mother-child binomium (MCB) assisted at Helios Salud, Buenos Aires, Argentina (1997-2006). Vari- ables potentially associated with PB (< 37 weeks) and NC were analyzed by logistic regression. We evaluated maternal CD4-cell count, CDC category, an- tiroviral therapy (ARV), early ARV exposure during pregnancy and obstetric complications for (PB); and maternal ARV exposure, mother’s mortality, mode of delivery, PB and birth weight < 2500 g for NC. Software: Stata 7.0.

Results: 204 MCB were analyzed: 18 live births followed by delivery. Of 181 live births, 138 completed diagnosis of HIV-1 infection. Ninety-eight per- cent received ARV during pregnancy (2 INTR+Nevirapine: 55%; 2 INTR+PI: 32%). Nevirapine was the most frequently used (47/65; 72%). Intrapartum zidovudine: 98% (174/178), and 99% of infants received zidovudine prophyl- ysis. No woman breastfed. Mode of delivery: 32% vaginal delivery, 68% cesarean section: 68% emergency cesarean section: 16%. Obstetric complications: 26%; PB: 16%; 95% CI: 12-22%; NC: 32%; 95% CI: 11-61% without PI, p=0.03. Birth weight < 2500 g: 10% (17/164 available birth weights) which was associated with PB (p=0.01). Of the newborns, 1.6% had congenital defects and 9% NC. Overall neonatal mortality: 2.2%; periva- tral transmission: 0.7% (1/138). PI use and obstetric complications were asso- ciated (p=0.01) to PB (OR: 3.21; 95% CI: 1.32-7.75 and OR: 3.51 95% CI: 1.42-8.64, respectively). Obstetric complications were associated with NC (OR: 3.6;
MOPE0238
Maternal-fetal pharmacokinetics of a single intrapartum dose of maraviroc in rhesus macaques

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Background: The risk of mother-to-child transmission of HIV can be reduced by a single intrapartum dose of nevirapine. However, subsequent development of resistance complicates future antiretroviral treatment strategies. The goal of this pilot study was to determine whether the maraviroc has suitable maternal-fetal pharmacokinetics to serve as an alternative intrapartum drug for reducing maternal-fetal transmission.

Methods: Four pregnant macaques received a single oral dose of maraviroc (2 each with 60 or 100 mg/kg) two hours prior to cesarean section. Multiple blood draws were performed on each mother and infant over 48 hours, with follow-up draws at 1 and 2 weeks. Plasma maraviroc concentrations were determined by HPLC-MS, with a lower limit of detection of 1 ng/ml. CCR5 receptor occupancy was determined by flow cytometry using a MIP-1 beta challenge assay on whole blood.

Results: Maximum plasma maraviroc concentrations were found at delivery (2000 ng/ml in mothers and 174 ng/ml in infants). CCR5 receptor occupancy in the mothers was 79% at 48 hours after dosing, and 82% in the infants. The mean fetal-to-maternal total AUC ratio was 0.16 (range 0.09 to 0.24). Maraviroc receptor occupancy data showed evidence of unprotected CCR5 receptors on CD4+ cells in the mothers -48 hours after dosing, and extremely low CCR5 expression on CD4+ cells of newborn macaques prevented determination of receptor occupancy in the infants.

Conclusions: In rhesus macaques, maraviroc was poorly transferred across the placenta, and was quickly cleared from the infants’ blood. The low fetal maraviroc concentrations and short pharmacokinetic profile in infants after a single maternal intrapartum dose of maraviroc suggests this approach would not be effective in reducing the risk of mother-to-child transmission.

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MOPE0239
Male partner involvement in prevention of mother-to-child transmission of HIV in Vietnam (PMTCT) - challenges and opportunities for intervention

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Background: Most pregnant women (PWs) with HIV in Vietnam are diagnosed at onset of labor, reducing the opportunity for effective prevention of HIV transmission. Studies indicate that increasing involvement of male partners in antenatal care (ANC) and PMTCT will result in earlier identification of HIV-positive mothers and an improvement in PMTCT service uptake.

Methods: A qualitative study investigated reasons for low involvement of men in PMTCT and made recommendations to improve it. Data were collected through 15 focus group discussions, in-depth and key informant interviews with PWs, male partners, families, community leaders and service providers in 3 high HIV prevalence provinces.

Results: The study found male involvement in HIV testing during routine ANC and PMTCT is minimal. Reasons for this includes men’s view that ANC and PMTCT is a women’s domain; men felt their time best spent on work matters. Men who were HIV-positive, or had risk behavior for HIV, actively avoided testing or disclosure of their status. Services were not male-friendly, with no information-education-communication (IEC) materials available to promote male involvement in ANC and PMTCT, and few male counselors.

Conclusions: The low involvement of Vietnamese men in PMTCT and ANC stems from cultural, social, economic and personal reasons. Encouraging men to regard involvement in ANC and PMTCT as a norm, for example through IEC materials that include male involvement, may initiate changes in partners’ behavior. Increasing availability of male-friendly services, male counselor and pre-marital counseling, holding IEC sessions in self-help groups and workplace settings, and outreach through mass organizations will encourage men to attend ANC and PMTCT. Increasing communication about mother-to-child transmission, and the effectiveness of its prevention, reduction of HIV-related stigma and discrimination will also encourage men with HIV-risk behavior to learn their status, for the sake of their children.

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MOPE0240
Mandatory prenatal HIV testing and the opt-in vs. opt-out debate: African/Caribbean women in Toronto weigh in


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Background: Mandatory and opt-in or opt-out prenatal testing policies reduce mother-to-child transmission and encourage early diagnosis and treatment of pregnant women. Yet they raise controversy regarding balancing public health benefits and reproductive agency. Since African/Caribbean women in Toronto are at risk for HIV during their childbearing years, we explored the opinions of forty-three African/Caribbean women (fourteen of whom discovered their HIV-positive status whilst pregnant) and factors that could have influenced their opinions.

Methods: Interviews were conducted as part of the Optimizing Prenatal HIV Testing in Ontario Study. To participate, African/Caribbean women had to have accessed prenatal care and be unaware of their HIV status before receiving it. Interview transcripts were thematically analyzed. Pearson Chi-Square tests were conducted to determine whether HIV status, cultural heritage, place of birth and perception of consent during the previous prenatal HIV testing experience were related to their opinions.

Results: Age: mean 29.2yrs, range 17-44yrs (SD 6.78). Place of Birth: 88%(n=38) were born outside Canada. Cultural Heritage: 44%(n=19) Carib-Bean, 56%(n=24) African. Most women (88% n=38) had no choice. 39%(n=17) IN, 22%(n=9) Don't know. Cultural Heritage: 39%(n=17) OUT, 22%(n=9) Don't know.

Conclusions: Findings suggest that African/Caribbean women in Toronto, regardless of their HIV status, place of birth and cultural heritage, had no choice. Those who did have a choice, women should opt-in or out.

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MOPE0241
Low risk of resistance in women receiving HAART for the prevention of breastfeeding-associated transmission and discontinuing drugs six months after delivery

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Background: One of the potential risks associated with maternal HAART prophylaxis for the prevention of postnatal transmission of HIV is the development of resistance. Although we do not meet the criteria for treatment, is the emergence of viral resistance at drug interruption.

Methods: We studied 51 antiretroviral-naive women (with CD4+ count > 350/mm3) enrolled in Malawi in a study aimed at evaluating safety of the maternal prophylaxis approach and receiving HAART from the 25th week of gestation until 6 months after delivery. At drug interruption, a three-week tail of zidovudine and lamivudine was administered to women receiving a nevirapine-based regimen. Viral resistance was assessed after drug discontinuation by the use of the TruGene assay.

Results: A total of 44 women had received zidovudine, lamivudine and nevirapine and 7 zidovudine, lamivudine and tenofovir. At baseline median baseline CD4+ count was 564/mm3 and HIV-RNA 3.9 log10/ml. Viral sequences were obtained at a median time of 60 days (range 28-135 days) after drug interruption. Four women among the nevirapine treated patients had NNRTI mutations (1 K103N, 1 Y181C, 1 G190A and 1 V108I mutation, respectively). However, the first 3 women had detectable viral load during treatment and had already developed resistance mutations before drug interruption (median HIV-RNA level at the time of drug discontinuation was 1.82 log10, and 1.57 log10 in women with/without mutation respectively). Viral load was controlled during treatment in the fourth woman but the V108I mutation was archived in baseline HIV-DNA. No mutation was observed in the lamivudine treated women after drug interruption.

Conclusions: Our findings show that the risk of developing resistance mutations in compliant women who receive HAART prophylaxis and interrupt drugs 6 months after delivery is low. We confirm the higher risk of developing resistance when interrupting drugs in the presence of high viral load, underlining the importance of drug adherence in these patients.

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**MOPE0242**

**Increasing access to PMTCT in Vietnam through community health system innovations**

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**Issues:** In Vietnam, PMTCT has been implemented since 2006 but remains one of the least accessible HIV services. Nationally, fewer than one-third of pregnant women with HIV receive prophylactic antiretroviral therapy. The maternal and child health care system offers an opportunity to increase access of PMTCT; 91% of women access ANC at least once during pregnancy at the community level.

**Description:** Save the Children, the Clinton HIV/AIDS Initiative, and Thai Nguyen Provincial Department of Health implement a model in 10 provincial and district hospitals and 66 communes that reaches nearly all pregnant women (PW) early in pregnancy. Community Health Workers in each commune are at the core of the model. CHWs are trained and equipped to add PMTCT services to monthly ANC clinics without additional salary or compromising regular services. CHWs provide pre-test counseling early in pregnancy and follow up every woman who tests positive for HIV and exposed children. Through linkages with district and referral sites, established at the provincial level with all providers, the CHW follows infected women and exposed children from home to hospital, supports treatment adherence, nutritional counseling and psychosocial service linkages.

**Lessons learned:** CHWs are able to add PMTCT services to maternal and child health services at the community level including follow-up care and treatment without disruption to regular services. After six months, 5,203 pregnant women or nearly 100% of all pregnant women in the communes received pre-test counseling. 98% (5,108) agreed to test and received their results. CHWs follow all women who test positive and exposed children to support ART and replacement feeding adherence and linkages with the district facility for out-patient services. Both providers and clients are satisfied with the model.

**Next steps:** The model which is being assessed for inclusion in the national PMTCT package for expansion to other provinces.

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**MOPE0243**

**KZN IMPACT 2009: determining equity in the provision of services for the prevention of mother-to-child transmission of HIV (PMTCT) in public primary health care settings in KwaZulu-Natal, South Africa**

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**Background:** This study investigated the association between HIV-positive pregnant women and their infants obtaining optimal antiretroviral therapy (ART) or PMTCT dual prophylaxis, as defined in the 2006 WHO guidelines, and urban rural location and socioeconomic position (SEP).

**Methods:** A cross-sectional survey among caregivers bringing a child for immunization was undertaken in the 347 fixed public primary health care facilities of six districts. As HIV testing uptake was 90.3%, this analysis included 4314 mothers, who reported testing HIV-positive, with an infant <16 weeks. Urban rural location was defined by the population density of the catchment area of the facility. SEP was measured using education and occupation of parents, and a household deprivation index, derived from housing material, access to services and assets. Associations were measured using log binomial regression models.

**Results:** Optimal PMTCT prophylaxis was reportedly obtained by 22.4% (95% confidence intervals (CI) 20.1% - 24.9%) of the HIV-positive women. Women from more deprived quintiles in the two more deprived quintiles were less likely to obtain optimal prophylaxis, but this association was not significant in the multivariable model. Similarly, the positive association of the father and mother completing grade 12, and the negative association of mother’s self-employment; occupation of parents, and a household deprivation index, derived from housing material, access to services and assets. Associations were measured using log binomial regression models.

**Conclusions:** In a setting where PMTCT prophylaxis has been universally provided, without cost to users, through the public health system, only one in five women reported optimal ART or PMTCT prophylaxis. In addition, facilities located in rural settings in this high prevalence context warrant attention.

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**MOPE0244**

**Trends in the management and outcomes of HIV-infected women and their infants at sites in Latin America and the Caribbean: 2002-2009**

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**Background:** The NISDI Perinatal Protocol enrolled HIV-infected pregnant women and their infants at sites in Argentina, the Bahamas, Brazil, Jamaica, Mexico, and Peru from 2002-2007. A revised protocol (ULAC) enrolled in 2008-2009. We describe temporal trends in the management and outcomes of these HIV-infected women and their infants.

**Methods:** Women were enrolled during pregnancy and followed for ≥ 6 months in both protocols. The study population comprised first-on-study pregnancies for women with singleton live births with available data. Variables were compared by year of enrolment grouped in 2-year periods from 2002-2009. P-values were calculated using the chi-square test.

**Results:** Of 1569 enrolled women, 1344 were mothers from Argentina. 1119 women (83%) and 1112 infants (83%) completed follow-up through 6 months after delivery/birth. Over time, more women had initial viral loads (VLs) (copies/ml) < 1000 e.g., 51% in 2002-03 vs. 64% in 2008-09; p=0.0055) and CD4 counts (cells/mm³) > 500 cells/mm³ (e.g., 32% in 2002-03 vs. 46% in 2008-09; p=0.0951). Additionally, more women had VL < 1000 after delivery (p=0.03). There was an increase in the use of 3-drug and PI-based regimens as the most complex ARV regimen during pregnancy (p=0.0011). All mode of delivery (34% cesarean before labor/before ruptured membranes) was unchanged over time. 99% of infants received ARV prophylaxis within 7 days after birth. Breastfeeding was reported for less than 1% of infants. The rate of mother-to-child transmission (MTCT) of HIV did not change significantly over time (overall = 1.0%).

**Conclusions:** Over time, the initial VL and CD4 indices improved, possibly reflecting greater access to ARTs and/or use of more potent regimens. There were temporal trends in the types of ARV regimens used during pregnancy. Maternal outcomes improved over time (more women with VL < 1000 after delivery), and the MTCT rate was very low.

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**MOPE0245**

**Evaluation of prematurity among HIV infected and non-infected women in Rio de Janeiro, Brazil**

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**Background:** HIV status of the pregnant women, treatments, and pregnancy outcomes. The aim of this study is to evaluate intervening variables in the occurrence of prematurity in pregnant women infected or not with HIV.

**Methods:** It is an unmatched case-control study (3 controls per case). Cases were derived from a prospective cohort study of all HIV-infected pregnant women followed from 1995 to 2005, in a reference center in Rio de Janeiro. Controls were derived from a random sample of all pregnant women who gave birth at the Rio de Janeiro Municipality between 1999 and 2001. All relevant socio-demographic, nosological, and pregnancy outcomes data were collected from both cohorts. To evaluate the prenatal care, we calculated the Kotelchuck modified index, it measures the concentration of prenatal visits during the care period, according to gestational age at birth. Comparisons were performed using Student’s-t and Chi-square test. Variables with p-value <0.25 were included in a logistic regression model.

**Results:** There were 713 cases and 2145 controls. Variables associated with prematurity, controlling for cases and controls were less than 8 years of education (OR=1,35, 95%CI=1,07-1,70), hypertension (OR=1,54, 95%CI=1,06-2,26), more pregnancies (OR=1,10, 95%, CI=1,02-1,19), and inadequate Kotelchuck modified index (OR=1,99, 95%CI=1,40-1,78).

**Conclusions:** In conclusion, education, - hypertension, more pregnancies, and inadequate number of prenatal care visits were associated with prematurity, even adjusting for HIV status. Although in Brazil, the HIV care is free of charge, pregnant women are still reaching late the specialized care, with consequently higher rates of prematurity. Better access to care must be offered to this population, and studies of prematurity in the HIV infected women must evaluate how late these women reach their care.

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**MOPE0246**

Involving community based volunteers and using registers to mitigate low return for follow up of HIV exposed infants at Itezhi-Tzezi Hospital

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**Issues:** Itezhi-Thel is rural government hospital in the southern province of Zambia. The hospital has an ART care and treatment clinic, Itezhi-Thel has an antenatal HIV prevalence rate of 13.5%. The challenge faced by ART clinic was that HIV-exposed babies were not being brought back for follow up.

**Description:** In response to the challenge the hospital introduced the use of registers which are populated with concise demographic details of the mothers. These registers are shared with Community Volunteers who are trained in Safe Motherhood and PMTCT. The volunteers use the registers to track the exposed babies and send them to the clinic for: coin-morixazone prophylaxis, dried blood spot (DBS) and monitoring for any opportunistic infection (OI). Mothers are encouraged by the Community Based Volunteers to go for PMTCT, take babies for growth monitoring clinic and dates for collection of coin-morixazone.

**Results:** From January to June 2009, 117 antenatal mothers were found to be HIV-positive and followed up. Of all mothers, 44 babies (38%) were brought to the clinic for follow up. After the introduction of community based volunteers and use of registers, July to December 2009, 202 mothers who were HIV-positive and a total of 128 babies (63%) were brought back to the hospital for follow up.

**Next steps:** Use of registers and community volunteers helped to track babies who could have missed the DBS, prophylaxis, and OI evaluation. These infants can now be followed up for appropriate HIV testing and clinical evaluation.

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**MOPE0247**

Assessing four prong strategies to improve ART quality and coverage for preventing vertical transmissions in six countries - case study on the failures and challenges in policy development and implementation of prevention of vertical transmission programmes in Argentina, Cambodia, Moldova, Morocco, Uganda and Zimbabwe

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**Issues:** Challenges in implementation of prevention of vertical transmission programmes in 6 countries.

**Description:** The study focuses challenges in PVT to reach the very group it was designed for - HIV-positive pregnant women. One of the key reasons for failure is the emphasis has been narrowly focused on providing ART to newborns and not on the other essentials. Civil society activists in six countries conducted on-the-ground research used a standardized research template to interview 15-25 key informants in each of their countries, including current and former MoH, ministers, representatives of medical organizations aids activists, NGOs, women's organizations, health consumers and their family members. The study is aimed at analyzing the situation based on four-prong strategy - the comprehensive approach adopted in 2003 by the UN.

**Lessons learned:**

a) the emphasis of governments and UN agencies has been on providing ART to new borns rather than essential prevention and treatment services to HIV positive women and girls;

b) the dangerous inconsistency between national policies and actual practice and the UN's global infant feeding guidelines;

c) health services are not designed to delivered to meet the needs;

d) inadequate integration between PVT programme ART services, maternal and child health.

In Argentina, many pregnant women visit health centers in their late pregnancy while a majority of births occur outside medical facilities in Cambodia.

**Next steps:** With national governments and other international institutions acknowledging the importance of the problem, the community has called to measure and report progress at UNGASS June 2010, increase access to triple-dose prophylaxis regimen, revive national infant feeding policies, increase funding for PVT, better integrate PVT programme with family planning, sexual and reproductive, maternal and child health. This presentation will discuss the particular experimental challenges and how they overcome including specifying on how the six teams pursue their follow up advocacy in different settings.

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**MOPE0248**

Efficacy of a regular implementation of the mother-to-child transmission plus program in Burkiná Faso, Western Africa

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**Background:** The Mother-To-Child Transmission-Plus (MTC-Plus) program, promoted by the World Health Organization (WHO) since 2003, has as main aim to assure health assistance to the families of the HIV+ tested women, besides lowering the rate of the Mother-to-Child transmission of the disease. Aim of our study was to assess HIV prevalence rate among family members of the HIV-infected women detected at Centre Medical St Camille in Ouagadougou, the Burkiná Faso capital.

**Methods:** HIV testing is offered to all partner of the HIV+ pregnant woman, to their co-wives and to their previous children, even those had from partners different from the current one, and also to other children born during the follow up. Data were analyzed by Epi.Info 3.5.1, a statistical data program created by CDC (Centers for Disease Control) of Atlanta (USA) and sponsored by WHO.

**Results:** From the 1st May 2002 to the 30th September 2008, 354 HIV+ pregnant women were recruited for the MTC program. Among the total of the women’s family members (344 partner and 647 children), 182 partners (52.9%) and 417 children (64.3%) were tested. Of them, 159/182 partners (83.2%) tested positive. Among the children 29/417 (6.9%) resulted to be infected: 10 cases are MTC-FTCT failures regarding women who were already under the program during the pregnancy, 19 are positive children had from previous pregnancies.

**Conclusions:** MTC-Plus approach is an important tool to increase the survival of mothers and children and to identify early those HIV-infected subjects eligible for the treatment. Cultural factors may act as a barrier to the full implementation of MTCT-plus program.

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**MOPE0249**

HIV/HCV and HIV/HBV coinfection: study of mother-to-infant transmission

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**Background:** Infection of pregnant women by hepatitis B, hepatitis C and HIV is important due to the risk of vertical transmission in the perinatal period. The aim of the study was to compare HIV-1/HCV and HIV-1/HBV coinfection rate in HIV-1-infected, HIV-1/HCV and HIV-1/HBV-coinfected women.

**Methods:** We observed 1273 HIV-1 positive pregnant women enrolled in the Moscow Centre of AIDS. Samples from these women and their infants were tested for:

1) anti-HIV-1, HBsAg, anti-HCV using ELISA with a confirming test;

2) HBV, HIV and HIV viral load by PCR.

**Results:** HIV-1 infected pregnant women were divided into three groups: 1 group - 58,84% (749/1273) - infected with HIV-1; 2 group - 30,95% (394/1273) - infected with HIV-1 and HCV; 3 group - 10,21% (130/1273) - coinfected with HIV-1 and HBV. In the first group HIV-1 perinatal transmission rate was 3,3% (25/749). In the second group HIV-1 perinatal transmission rate was 7,3% (29/394), combined HIV-1/HBV perinatal transmission was 1,3% (5/394), HCV perinatal transmission was 4,1% (16/394). In the third group HIV-1 perinatal transmission rate was 1,9% (2/130), combined HIV-1/HCV perinatal transmission was 0,8% (1/130), HBV perinatal transmission was 0,8% (1/130).

**Conclusions:** HIV-1/HCV coinfection in pregnant women increase the HIV-1 perinatal transmission rate.

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**MOPE0250**

The role of early infant diagnosis (EID) on providing timely pediatric care and treatment experience from Tanzania

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**Background:** Recent Tanzania HIV Indicator survey (THIS) has shown 8.2% of pregnant women attending ANC are HIV-positive. Although the country is implementing a nation wide program on prevention of mother-to-child transmission of HIV (PMTCT), the challenge has been how to ensure infants that are infected by HIV got relevant pediatric care and treatment at early stages of HIV progression. Also, ensuring Mother - child pair receive appropriate counseling and medication.

**Description:** In the past one year, with USAID support EngenderHealth assisted MOHMSW to improve the PMTCT program by ensuring all children born to HIV-positive mothers were enrolled into Early Infant Diagnosis (EID) program. A total of 24 sites in the registration to date and 958 infants enrolled 2,724 and 322 infants respectively. In these sites dried blood samples (DBS) of HIV exposed children were tested by Polymerase Chain Reaction (PCR) and results shared with respective facilities within 1 month. In Iringa, 1,941 infants (71%) and Manyara 153 (47%)
were tested for HIV. More children were found infected by HIV in Iringa (21%) than Manyara (10%). All 431 infants were referred to nearby Care and treatment centers for appropriate care and follow up.

Lessons learned: EID provided an opportunity for 431 infected infants to start pediatric care and treatment within one month after birth as opposed to the normal practice of waiting for 18 months to perform antibody HIV test. Follow up of Mother and child is still a challenge.

Next steps: This year EngenderHealth is adding an intervention known as Mother to Mother to address the follow up challenge of Mothers and infants in the community.

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MOPE0251: Reducing HIV stigma through integration of PMTCT services into routine RCH services in two regions of Tanzania

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Issues: Women’s stigma towards people living with HIV/AIDS as measured by a group of indicators is higher (76%) compared to Men (66%); as a result, the male involvement remains low in the reproductive health services in Tanzania including PMTCT, and yet men play a decisive role in family planning. Male involvement remains low in the reproductive health services in Tanzania including PMTCT, and yet men play a decisive role in family planning.

Methods: In 2009, Management Sciences for Health (MSH) conducted a needs-assessment to identify challenges to PMTCT in its sites, where only 45% of pregnant women tested HIV+ completed prophylaxis (542/1,372). This included formal qualitative measures of perceptions of PMTCT staff. MSH held guided focus groups with 33 PMTCT staff in five sites. The interview questionnaire was based on the international literature on PMTCT. One month later, 26 PMTCT staff from 24 MSH sites completed a written questionnaire which was developed using the focus group results. The data was analyzed based on the five themes and their relative importance elicited from the informants.

Results: Almost all pregnant women attending Antenatal Care (ANC) are screened and accept HIV testing. A recently compiled data showed that 49,196 men were sited as a major barrier to PMTCT uptake. Most births occur at home and women rarely bring the newborn to receive prophylaxis. Few curing and education materials exist to ensure quality of ‘post-test’ counseling. Lastly, many newly identified HIV+ pregnant women refuse to accept their status.

Conclusions: Support services (including transportation and psychosocial services) are essential to support adherence to PMTCT among low-income HIV-positive pregnant women. Improved support services are being implemented in 2010.

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MOPE0253: Needs assessment of MSH PMTCT program in Haiti: stakeholder perceptions

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Background: Over 150,000 pregnant women were tested for HIV between October 2008 and September 2009 in Haiti (MESI database) approximately 50%. Eighty-five percent (85%) of Haitian women have at least one (1) prenatal visit. EMMSU - IV UNAIDS estimates that 43% of HIV-positive pregnant women in Haiti receive prophylaxis for Prevention of Mother-to-Child Transmission (PMTCT). (UNAIDS/WHO, 2009).

Methods: In 2009, Management Sciences for Health (MSH) conducted a needs-assessment to identify challenges to PMTCT in its sites, where only 45% of pregnant women tested HIV+ completed prophylaxis (542/1,372). This included formal qualitative measures of perceptions of PMTCT staff. MSH held guided focus groups with 33 PMTCT staff in five sites. The interview questionnaire was based on the international literature on PMTCT. One month later, 26 PMTCT staff from 24 MSH sites completed a written questionnaire which was developed using the focus group results. The data was analyzed based on the five themes and their relative importance elicited from the informants.

Results: Almost all pregnant women attending Antenatal Care (ANC) are screened and accept HIV testing. A recently compiled data showed that 49,196 men were sited as a major barrier to PMTCT uptake. Most births occur at home and women rarely bring the newborn to receive prophylaxis. Few curing and education materials exist to ensure quality of ‘post-test’ counseling. Lastly, many newly identified HIV+ pregnant women refuse to accept their status.

Conclusions: Support services (including transportation and psychosocial services) are essential to support adherence to PMTCT among low-income HIV-positive pregnant women. Improved support services are being implemented in 2010.

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MOPE0254: PMTCT interventions increase deliveries at health facilities: experience from Iringa and Manyara regions in Tanzania

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Issues: HIV prevalence among women attending Reproductive and child Health Clinic (RCHC) in Tanzania is 8.2%. (THIS, 2009) 95% and 60% of pregnant women attend at least one to four ANC visits respectively, but only 47% of pregnant women actually deliver in health facilities. This gap between rates of ANC attendance and facility-based deliveries is a concern, since the latter is considered an important determinant of favorable maternal and PMTCT outcomes.

Description: EngenderHealth ACQUIRE Tanzania Project (ATP) initiated the male involvement strategy at Mtwango Health Center, Iringa region.

Outcomes: In the pilot period from October 2008 to September 2009, total deliveries in Manyara region increased from 4,610 to 9,016 (95% whereas in Iringa region recorded an increase of 94% from 6,901 to 13,365). Facility audit information was used to design a strong PMTCT program. PMTCT interventions included improving service providers delivery skills, minor renovations focusing on RCHC and L&D and ensuring delivery supplies and equipments are constantly available. These interventions were the main drivers for improved quality of MCH services that in turn contributed to increased health facility deliveries. Generally, both outpatient and inpatient attendances have increased at all facilities.

Next steps: In future PMTCT expansion, districts have committed to use facility audit information to design strong PMTCT program. Importantly, interventions targeted to improve health facility deliveries will be paramount as they have shown multiplier effect on promoting usage of entire health services.

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MOPE0255: Improvements of PMTCT through male involvement: experience from Mtwango Health Centre in Iringa rural district, Tanzania

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Issues: Male involvement remains low in the reproductive health services in Tanzania including PMTCT, and yet men play a decisive role in family matters. This situation exacerbates difficulties in the disclosure of HIV testing results, and partner support for accessing PMTCT services; including women adherence to ARV prophylaxis and infant feeding recommendations. Thus, improving male involvement and couples counselling/testing during antenatal care (ANC) is crucial for sound PMTCT program impact. EngenderHealth through ACQUIRE Tanzania Project (ATP) piloted the male involvement strategy at Mtwango Health Center, Iringa region.

Outcomes: Community involvement has a role to play in increasing male involvement. ATP used multiple strategies to involve males into PMTCT clinics. We have learned that men can positively respond to participate in the PMTCT program if they are involved from the beginning of the program; otherwise they feel marginalized by inadequate access to information.

Next steps: ATP will encourage RCH clinics with male nurses to provide health information. Community nurses will prefer to receive health information from fellow men.

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MOPE0255
Where are the men? Understanding male involvement in the prevention of mother-to-child HIV transmission
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Background: Involvement of male partners may increase adherence to the prevention of mother-to-child HIV transmission (PMTCT) and improve outcomes. Greater understanding of factors impeding male testing may increase testing rates and adherence to PMTCT.

Methods: A cross-sectional, mixed-methods study was conducted at a community health-center in Tshwane, South Africa. Semi-structured interviews were completed with 124 men whose partners had been recently pregnant (past three years). We subsequently evaluated responses to six invitation cards encouraging partner communication and clinic attendance.

Results: 100 (80.6%) participants knew their partners had tested during pregnancy. 74 (60.7%) had been tested with 34 (45.9%) testing positive; 39 (32.7%) tested during the pregnancy. A man’s likelihood of testing was associated with increased HIV/AIDS knowledge, believing that male testing is important, and having a partner who had tested. Higher male testing was associated with increased HIV/AIDS knowledge, believing that male testing is important, and having a partner who had tested.

Conclusions: Of men whose partners recently completed PMTCT, 60% have been HIV-tested; over half of these during their partners’ pregnancy. Quality and content of communication are important factors in male-partner testing. This study demonstrated the acceptability of an invitation card that could facilitate communication between partners and male testing in PMTCT.

MOPE0256
Efficacy of ART/prophylaxis regimen and elective infant feeding counselling in preventing HIV transmission from mothers to newborns in Pakistan
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Background: Pakistan’s Prevention of Parent-to-Child Transmission (PPTCT) programme was implemented in 2007. ART and concerted exclusive infant feeding counselling are effective in preventing mother-to-child HIV transmission.

Method: During March 2007- Dec 2009, forty two women of reproductive age who tested negative for HIV in PPTCT were given ARV prophylaxis if CD4<350mm (Zidovudine from 28 week gestation, Zidovudine+ Lamivudine+ Nevirapine during labour, Zidovudine+ Lamivudine, one week postpartum) or ART if CD4>350mm and all were provided infant feeding counselling. All infants were given ARV prophylaxis after birth. Outcomes in terms of pregnancy complications, mode of delivery and perinatal transmission of HIV were measured.

Results: Out of forty two women registered, thirty one delivered at term (74%), four had miscarriages (10%) while seven (17%) had ongoing pregnancies. ARV prophylaxis was given to twenty three (55%) while ART to nineteen (45%) women. Out of 31 deliveries, fifteen (48%) delivered vaginally; sixteen (52%) had cesarean sections; two opted for exclusive breast feeding and ten (24%) chose formula feeding (FF) after it was determined that a FF option was affordable, feasible, acceptable, safe and sustainable (APASS). Counselling for adherence to an exclusive FF option was provided to all women for six months. Out of twenty six babies tested so far with HIV PCR at 6-8 weeks, twenty five (96%) were found HIV negative while one (4%) HIV-positive.

Conclusion: An appropriate ARV or ART regimen coupled with the applicability of APASS and concerted infant feeding counselling are effective tools in preventing mother-to-child HIV transmission.

MOPE0257
Revising Pakistan’s prevention of Parent-to-Child Transmission Programme (PPTCT) to indentify women of reproductive age most at risk for HIV in a concentrated epidemic
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Issues: Pakistan’s PPTCT programme from 2007 - 2009 focused on testing through the general antenatal population in six tertiary care sites. Of over 14,000 women tested, only 3 were found to be HIV-positive. At the end of 2009, the National AIDS Control Programme and UNICEF undertook an informal evaluation to re-orientate the PPTCT programme to reach the women who need the services.

Description: This informal evaluation was carried out in first half of October 2009 and was based on interviews/discussions with health professionals providing PPTCT services, relevant NGOs, program managers, UN counterparts and representatives of people living with HIV. Visits to PPTCT and VCT centres were carried out to get firsthand knowledge of existing programming in the country. In addition, Pakistan’s health infrastructure, existing human and financial resources and HIV statistics were also reviewed to find gaps in the existing program and devise appropriate strategies to reach population in need of these services.

Lessons learned: Pakistan PPTCT programme should not aim to provide HIV-PPTCT prevention and treatment services through general antenatal care, following a programming model developed for generalised epidemics. Resources should be used to identify and provide PPTCT services to most-at-risk populations.

Next steps: Decentralize HIV/PPTCT services through public outreach cadres to areas with a concentration of PLHIV, and to NGOs working with injecting drug users and male and female sex workers. Additionally, to promote HIV messages and self-identification of risk, the PPTCT programme should be integrated into existing national programmes including Maternal and Child Health, Reproductive Health, and Hepatitis B.

MOPE0259
Implementing rapid HIV testing on labor and delivery units: limiting mother-to-child transmission and providing access to care for HIV-infected women
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Issues: HIV testing of pregnant women is key to prevention of mother-to-child transmission (PMTCT) of HIV and helping HIV-infected women access services. However, many women either lack prenatal care or are not offered a test, resulting in missed prevention opportunities. Thus, the PPTCT programme should be integrated into existing national programmes including Maternal and Child Health, Reproductive Health, and Hepatitis B.

Lessons learned: The most successful component of RTLD is the local, personalized approach to each hospital’s needs. Working with many individuals across multiple departments and using diverse methods of training and technical assistance have been essential. In the first 2.5 years of the project, 163/253 (64.4%) of the hospitals in the State agreed to participate. By December 2009, 152 of the hospitals (60.1%) were providing rapid testing to women without a documented HIV test result.

Description: The California Rapid HIV Testing in Labor and Delivery (RTLD) project was implemented in 2007. RTLD was designed to provide assistance to help L&D staff access HIV test kits, implement testing, discuss results with patients, initiate PMTCT, and connect infected women to services.

Next steps: This project is serving as a model for facilities looking to improve prenatal HIV testing rates, as well as for hospitals implementing rapid testing in Emergency Departments. RTLD will continue until 2011, by which time it is anticipated that most hospitals will provide some rapid testing on L&D.

MOPE0258
Comprehensive outreach model - an inspirational effort in prevention of Mother-to-Child transmission program in Andhra Pradesh
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Background: Prevention of Mother-to-Child Transmission program (PMTCT) is aimed to control and prevent vertical transmission. The barrier in implementing PMTCT program is inadequate access to institutional Antenatal Care (ANC) in terms of deliveries and Nevirapine (NVP) prophylaxis to Mother-baby pair (MBP). To bridge this gap, Andhra Pradesh State AIDS Control Society (AP AIDS-SCON), a consortium of 15 private medical schools initiated peer counselors’ project in November 2007.

Methods: 15 HIV-positive individuals were appointed as peer counselors in a two tiered system. The first tier was peer counselors working with patients in ANC in terms of deliveries and Nevirapine (NVP) prophylaxis to Mother-baby pair (MBP). To bridge this gap, Andhra Pradesh State AIDS Control Society (AP AIDS-SCON), a consortium of 15 private medical schools initiated peer counselors’ project in November 2007.

Next steps: This project is serving as a model for facilities looking to improve prenatal HIV testing rates, as well as for hospitals implementing rapid testing in Emergency Departments. RTLD will continue until 2011, by which time it is anticipated that most hospitals will provide some rapid testing on L&D.
15 Integrated Counseling and Testing Centers (ICTC) located in 15 private medical schools across 12 districts of Andhra Pradesh for, 1.Identification, counseling and testing of pregnant women; 2.Follow-up of HIV infected pregnant women for institutional delivery and administration of NVP to MBP.

Results: Number of pregnant women referred to 15 ICTCs (Oct 07-March 09) were 7684 and registered among them were 5434. Among the total tested at 15 ICTCs, 2.8% of pregnant women were HIV-positive. Peer counselors has increased from 6.4% to 35% (Oct-07-December-09). Percent of Institutional positive deliveries has increased from 52% to 70% (2008-09). Maternal HIV prevalence in high risk population increased from 0.4% to 8.7% (Oct-07-December-09) where as percent of Home deliveries has decreased from 9% to 3% (Oct-07-December-09) and percent of NVP coverage to MBP has increased from 73% to 95% (Oct-07-December-09).

Conclusions: Linkage of Peer counselors with outreach workers of other stakeholders and small private maternity hospitals that provide services to positive ANC's would significantly contribute to demand generation to ICTC's, institutionalized VCT services and NVP coverage. Implementation of affirmative action for ANC's, tracking of ANC positives due to incorrect addresses, convincing the Gynecologists of private medical colleges to conduct positive deliveries, administering NVP to MBP in case of home deliveries occurring outside the catchment area and advocacy with village heads to run the program with in their community wereissues were discussed.

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MOPE0260
Implementing a comprehensive community-based PMTCT program in Jakarta and scaling-up the program into nine provinces in Indonesia

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Issues: There is a lack of access for VCT and PMTCT services among pregnant women in Indonesia. A comprehensive community-based PMTCT program is needed for HIV transmission from mother to baby, and to reduce the psychological problem among HIV-positive women and their families.

Description: Pelita Imit Foundation (PIF) has been implementing the comprehensive community-based PMTCT program (supported by GFATM) since 2003 that involve thousands of pregnant women in 17 slum areas in Jakarta. The comprehensive community-based PMTCT program has increased from 2,000 to 100,000 pregnant women. PIF has expanded the program into nine provinces in Indonesia. PIF works with one local NGOs in each provinces in implementing those activities. From June 2009 – December 2009, 1630 pregnant women took HIV pre-test counseling in nine provinces; 1324 of them took blood test; 1416 took HIV post-test counseling; 17 of them diagnosed HIV-positive (1.1%). The program also received referral cases of 19 HIV pregnant women from some hospitals. All of 36 women received ARV prophylaxis; 30 was supported by cesarean and 3 normal delivery; 28 babies born to them received formula milk. Ten babies whom took PCR test; nine of them diagnosed HIV negative.

Lessons learned: The role of NGO is important in implementing the comprehensive community-based PMTCT program. The government supports the need for scaling-up a small scale program done by an NGO to other provinces.

Next steps: Because of the need of community, the program will be expanded to other provinces in Indonesia.

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MOPE0261
How early should HAART be started to maximize PMTCT effectiveness?

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How early should HAART be started to maximize PMTCT effectiveness? We investigated time between starting HAART and delivery. We tested whether interventions in maternity wards could improve maternal-HAART for mothers with WHO stage III/IV or CD4< 250, otherwise AZT prophylaxis was offered. We studied time between starting HAART and delivery in Gaborone, Botswana: 2009 cohort.

Methods: We conducted a retrospective cohort analysis of pregnant HIV-infected women in Gaborone, Botswana, where those whose CD4 count ≤ 350 were offered HAART. We studied time between starting HAART and delivery - the “maternal HAART interval” - and its impact on infant HIV infection at 6 weeks.

Results: 1,017 HIV-infected pregnant women who started HAART between January 2008 and July 2009 were included in our analysis. The mean gestational age at entry was 21 weeks (SD ± 5.4); median CD4 count was 235 (IQR 166-360); and mean hemoglobin was 11.2 g/dL (SD ± 2.3). The median maternal HAART interval was 13 weeks (IQR 9-19). Forty-three (4.2%) women were HIV-infected. Although not statistically significant, maternal CD4 count < 200 (adjusted OR 0.6; 95% CI 0.9-7.4) and hemoglobin < 8 g/dl (adjusted OR 2.9; 95% CI 0.9-9.0) appeared to elevate risk for HIV transmission. Compared to those who started HAART preconceptually, women who started HAART for < 4 weeks had a 5.8-fold (95% CI 1.3-26.1) increased odds of HIV transmission. No statistically significant differences were observed for women who started HAART 4-12, 13-19, or ≥20 weeks prior to delivery. Locally weighted regression analysis suggested no additional benefit beyond a 16-week HAART interval (Figure 1).

Conclusions: Women eligible for HAART should receive at least 4 weeks of treatment prior to delivery and preferably 16 weeks for maximal benefit. Novel approaches to link PMTCT and HIV treatment are urgently needed.

MOPE0262
Improving HIV counseling in maternity wards in Swaziland increases uptake of PMTCT services: an operations research study addressing missed opportunities in maternity wards identifies more women with HIV and provides better uptake of ARV prophylaxis

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Background: Review of Swaziland 2007 PMTCT data showed 15% of women presenting for delivery in facilities with unknown HIV-status were not tested for HIV; 5-19% of women testing HIV-negative antenatally were HIV-positive at delivery. We tested whether interventions in maternity wards could improve performance of maternity nurses in addressing missed opportunities in PMTCT service provision.

Methods: Six maternity facilities in Swaziland were assessed using qualitative and quantitative methods. A one-day training specifically for maternity nurses was given in three facilities as intervention sites, with key messages for counseling and actions based on women's status on arrival in maternity (HIV-positive, negative, or unknown). Data were collected through interviews on HIV testing and intake of ARVs prior to delivery. Cord blood samples were tested for HIV and presence of NVP.

Results: Fifty-eight midwives were trained in intervention sites. Between 1 October 2008-January 2009, the study enrolled 2444 women (three control sites: 1226 women; three intervention sites: 1212 women). Sites receiving training identified 85% (101/119) of women with HIV-positive cord blood who had not been previously diagnosed with HIV, compared with only 59% (155/267) in control sites (p<0.05). ARV coverage was higher at intervention sites among all cord-blood-positive women, 80% in intervention sites compared to 69% in control sites (p<0.0001), and in the three sub-groups of women: known HIV-positive, previously HIV-negative and arriving with unknown status. Notably, among women previously negative, 54% (13/24) of those positive at maternity received ARV prophylaxis in intervention sites compared to 26% (9/34) in control sites (p=0.03).

Conclusions: Focused training was effective in providing better identification of women with HIV and for greater provision of ARV prophylaxis. Maternity wards are the last opportunity for PMTCT services before delivery. Women continue to be exposed to HIV during pregnancy and access to PMTCT services at the time of delivery should be expanded.

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MOPE0263
Prevention of mother-to-child transmission of HIV infection (PMTCT) at the Botswana-Baylor Children’s Clinical Centre of Excellence (BBCCOE) in Gaborone, Botswana: 2009 cohort

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Background: The United Nations has called for universal PMTCT coverage (~80%) by 2010 and an HIV-free generation by 2015. Botswana has achieved this target, and has seen a substantial reduction in the number of new infant infections. Yet there remain mothers who deliver infants without the benefit of PMTCT interventions. The BBCCOE cares for, counsels and tests several hundred infants born to HIV-infected mothers annually. This study describes BBCCOE’s 2009 PMTCT experience.

Methods: A review of the PMTCT coverage and infant HIV testing (DNA PCR) among pregnant infants enrolled at the BBCCOE in 2009. PMTCT coverage—mother or infant having received any portion of Botswana’s PMTCT approach (maternal-HAART for mothers with WHO stage III/IV or CD4 < 250, otherwise AZT from 16 weeks gestation); infant: cdNVP+4 weeks AZT).

(Fig 1: Time on HAART & probability of HIV+ infant)

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MOPE0264
Are all exposed babies really linked to care?
A retrospective cohort analysis from Mumbai
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Background: Although several studies reveal the proportion of HIV-positive children linked to paediatric HIV care, little is known about the vast majority of exposed babies lying beneath the tip of iceberg who remain untraced and undetected. In resource constrained settings as ours, detection of HIV infection in children occurs at 18 months.

Methods: A retrospective cohort study was carried out among babies born between 2005-2007 to positive mothers enrolled in PPTCT programme in Mumbai. Data on mother's socio-economic survival rate and HIV prevalence at 18 months and to analyze differentials influencing the HIV infection rates. HIV-positive women delivering a live baby were included in the study. Information regarding address, antiretroviral prophylaxis and infant feeding were obtained from records at PPTCT centres. Positive mothers and their babies were traced at 18 months for HIV testing with the help of outreach workers working in the field of PPTCT.

Results: A total of 1601 live births to positive mothers were identified. 507 (31.7%) babies were traceable out of whom, 413 (81.4%) babies were found to be HIV-negative showing some uptake of counselling and testing, while 193 (38.6%, 95% CI), 413 babies (92.9%) accepted HIV testing and the mean HIV positivity among them was 10.7% (7.8%-14.0%, 95% CI). 314 mother baby pairs received formula feeding. Among HIV-positive women who breastfeed showing some uptake of counseling and testing, the probability of receiving HIV counselling and testing increased from 66.3% (95% CI 64.8-67.7) in 2004 to 84.5% (95% CI 84.1-84.9) in 2009.

Conclusions: Unsafe feeding practices are widespread among HIV-positive women, with most choosing to formula feed their infants, even when this is not feasible or safe in their home situation. Mixed feeding is uncommon among HIV-positive women who breastfeed showing some uptake of counseling and testing. Multidrug therapy has significantly increased more than on replacement feeding.

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MOPE0265
Trends in PPTCT service utilization in Addis Ababa, Ethiopia
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Background: Prevention of Mother-to-Child Transmission (PPTCT) remains to be the effective prevention intervention in combating new HIV infections. The challenges in PPTCT programme implementation combined with an ever changing scientific advances call for frequent revisit for policies and strategies, and Ethiopia is not an exception. However, trend in PPTCT service utilization has not been documented since the launching of the programme.

Methods: Reports from Feb 2004 to August 2009 were reviewed in 10 sub-cities in Addis Ababa, Ethiopia. The data was collected from May to October 2009.

Results: Of the 663 603 Antenatal Care (ANC) attendees 24.6% were new babies. The probability of receiving HIV counselling and testing increased from 66.3% (95% CI 64.8-67.7) in 2004 to 84.5% (95% CI 84.1-84.9) in 2009 with variations across the sub-cities. The HIV prevalence declined significantly from 10.5% in 2004 to 6.0% in 2009 (X2 trend p<0.001). The overall ART prophylaxis utilization by the women and their infants remained low, 42.4% (95% CI 41.4-43.2) and 31.9% (95% CI 30.0-31.6) respectively. The HIV-positive women in 2009 were over 18 times (PR 18.5 X 10-3) more likely to be referred for treatment, care and support than their counterparts in 2004. The probability of exposed babies declined significantly by 42% (PR 0.58, X2 trend p<0.001) more likely to be referred for treatment, care and support than their counterparts in 2004. The probability of exposed babies declined significantly by 42% (PR 0.58, X2 trend p<0.001) from 66.3% (95% CI 64.8-67.7) in 2004 to 84.5% (95% CI 84.1-84.9) in 2009.

Conclusions: HIV positive women in the last few years were tracing started from 2004. The proportion of infants testing for HIV decreased significantly by 14% from 6.1% in 2004 to 5.3% in 2009 (p<0.01). The HIV prevalence among exposed babies declined significantly by 42% (PR 0.58, X2 trend p<0.001) from 66.3% (95% CI 64.8-67.7) in 2004 to 84.5% (95% CI 84.1-84.9) in 2009.

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MOPE0266
Feeding choices of HIV-positive and HIV-negative mothers in Kwazulu Natal, South Africa: 2009
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Background: The United Nations Millennium Development Goal for child survival requires countries to reduce child mortality by two-thirds before 2015, but, in South Africa child mortality is increasing, mainly due to perinatal AIDS. Mother-to-child transmission of HIV during breastfeeding accounts for many infant infections annually, but replacement feeding is associated with increased mortality from malnutrition, diarrhoea and pneumonia. Guidelines for prevention of mother-to-child transmission recommend using APASS (affordable, feasible, accessible, safe and sustainable) criteria to guide feeding choices. This study describes mothers’ feeding choices in light of APASS criteria.

Methods: Interviews were conducted with mothers attending 347 primary health care delivery clinics in 6 districts of KwaZulu-Natal, between May 2008 and April 2009. This analysis describes mothers bringing babies aged 4-8 weeks.

Results: Of 7860 mothers, 3119 (40.0%) reported themselves HIV-positive, of whom 1853 (59.4%) reported formula feeding, 1095 (35.1%) exclusive breast feeding, and 92.2% mixed feeding. Among 4687 negative mothers, 666 (14.2%) reported formula feeding, and 1035 (22.0%) mixed feeding. Of HIV-positive mothers choosing to formula feed, 421/1853 (22.7%) had piped water at their homes whereas vs 190/1095 (17.4%) who chose to breastfeed. 159/1853 (8.6%) formula feeding mothers accessed water from rivers versus 153/1095 (11.2%) who chose to breastfeed. 432/1853 (23.3%) of formula feeding mothers had a flush toilet at home versus 190/1095 (17.4%) breastfeeding mothers and 1163/1853 (62.9%) had pit latrines, compared to 753/1095 (68.8%) breastfeeding mothers. Of 666 HIV negative mothers who reported formula feeding, 19/29.2% had piped water vs 421/1853 (22.7%) who had flush toilets.

Conclusions: SAFE feeding practices are widespread among HIV-positive women, with most choosing to formula feed their infants, even when this is not feasible or safe in their home situation. Mixed feeding is uncommon among HIV-positive women who breastfeed showing some uptake of counseling and testing. Replacement feeding and multidrug therapy have significantly increased more than on replacement feeding.

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MOPE0267
PMTCT combination prophylaxis: the challenge of adherences in a complex regimen during pregnancy in Kyela, Tanzania
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Background: Following WHO guidelines for prevention of mother-to-child HIV transmission (PMTCT), combination prophylaxis starting in gestational week 28 is gradually replacing single-drug interventions in Tanzania. Combination prophylaxis is assumed to be more effective and less prone to resistance mutations. However, its complexity and need for frequent antenatal care (ANC) visits may pose a challenge on drug adherence for women in resource-constrained, peripheral regions. Our study aimed at providing insights into adherence to combination prophylaxis under real-life conditions and possible influential factors.

Methods: A cohort of 159 HIV-positive pregnant women eligible and willing to start combination prophylaxis within ANC at Kyela District Hospital with a longitudinal follow-up until delivery. Full adherence during pregnancy was defined at a cut-off point of at least 95% correct drug intake between week 28 and delivery, and was tested for bivariate correlations regarding social, demographic and economic aspects.

Results: From 159 women initially willing to participate, 42% never actually started prophylaxis. 34% started prophylaxis, but adhered to the regimen at rates below 95%. Less than a quarter (24%) of the women demonstrated full adherence until delivery. Factors like marital status, age, education, gestational week at first ANC visit, CD4-count, travel time to hospital, emerging transportation costs or omitting formula feeding activity were not significantly linked to full adherence. However, we found that full regimen adherence was significantly associated with having disclosed the HIV status to the partner (p=0.00) or to a relative/friend (p=0.01).

Conclusions: Full adherence to combination regimens in pregnant women is difficult to achieve in peripheral, resource-constrained settings. Our findings underline the importance of general and extensive supervision for pregnant women enrolled in complex regimens, and particularly of encouraging women to seek additional support in their social environments through status disclosure.

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MOPE0268
Effects of intensified prophylaxis during the post-natal phase on mother-to-child transmission of HIV-1. The ANRS C014- French Perinatal Cohort EPI-PHARM
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Background: Intensification of prophylaxis in the neonate is empirically recommended as “post-exposure” prophylaxis against HIV-1 transmission if the mother received no or a sub-optimal antepartum antiretroviral (ARV) regimen. Its efficacy has not been established for non-breastfed children.

Methods: The transmission rate associated with 4 to 6 weeks of zidovudine monotherapy was compared with that for all types of intensification (≥2 drugs) in 4730 neonates with well established HIV status, excluding in utero transmission, in the French Perinatal Cohort between 2000 and 2007. Results: Less than 1% of neonates received no postnatal prophylaxis, 85% zidovudine monotherapy, and 13% ≥2 drugs (intensification). Despite national guidelines, only 42% of neonates born to mothers without any ART during the pregnancy received postnatal intensification, the other infants receiving monotherapy: the transmission rate was significantly lower following intensified postnatal prophylaxis (1.6%) than zidovudine only (13%); p = 0.01. By contrast, for mothers treated during the pregnancy who had low viral load at delivery, the transmission rate did not differ between the 383 children receiving ≥2 drugs and the 3394 receiving monotherapy (0.5% vs. 0.4%; p = 0.7). Only 23% of the 269 treated mothers with viral load failure at delivery also received intensified prophylaxis, so difference in transmission rate (5.6% with intensification vs 2.5%; p = 0.2).

Conclusion: These data support the use of post-natal intensification when the mother does not receive therapy during pregnancy. When the mother’s viral load is controlled at delivery, intensification seems not offer significant added protection. Regarding mothers with high viral load viral load despot ART, we showed no association with post-natal intensification, but lack of powerful and performative sample expected considering the unexpected low proportion of neonates receiving intensification in this situation. These findings may lead to a new action in case of HIV diagnosis in the delivery room.

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MOPE0269
Implementing strategies to increase partner participation in PMTCT services in Mbeya Region, Tanzania
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Issues: Male involvement is assumed to significantly influence PMTCT program effectiveness. Although many programs theoretically seek to integrate partners, this has not led to a lasting paradigm shift regarding male participation in PMTCT services in the past decades. The development of effective strategies for partner involvement therefore constitutes an urgent need.

Description: In the frame of a PMTCT program in Mbeya Region, Tanzania, a preceding male-focused survey on obstacles to participate in PMTCT services was used to deduct strategies supporting partner integration. The obtained set of activities included invitation letters from health facilities, outreach campaigns, partner counselling and training of PMTCT providers or community decision makers, and male-friendly adjustment of PMTCT facilities. Implementation of those strategies was commenced in 2008. Effects on partner participation rates until the end of 2009 were assessed through quarterly regional monitoring reports.

Lessons learned: Between 2008 and the end of 2009, male participation rates in PMTCT services experienced an almost quadruplise rise from 5% to about 20%. Invitation letters distributed to absent men seemed to have increased reports of contacts in case of HIV diagnosis. A further assessment of implemented strategies would be insightful to differentiate respective levels of effectiveness. Prospective, the development of guidelines for partner involvement in PMTCT services would be desirable and compulsive for proceeding in integrating partners into those services.

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MOPE0270
Importance of CD4 counts among newly diagnosed HIV-infected pregnant women in India’s national Prevention of Mother-to-Child Transmission (PMTCT) program
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Background: Newly revised WHO guidelines (Nov 2009) highlight the importance of CD4 testing for all pregnant HIV+ women, and recommend antiretroviral therapy (ART) for everyone with CD4 ≤350 cells/mm³. In India, the national PMTCT programme provides antenatal HIV testing services to over 5.4 million women annually. We evaluated CD4 counts of HIV-infected pregnant women in four states (Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu) that account for over 60% of the national HIV burden to assess the proportion of women eligible for ART, and examined the strength of linkages between PMTCT and ART services.

Methods: Data on number of pregnant women tested and detected HIV+ were collected through the Computerized Management Information System of the National AIDS Control Organisation. Evidence reports were abstracted to analyze the number of pregnant women who received CD4 testing, proportion with CD4 counts ≤350 cells/mm³, and number of HIV+ pregnant women started on ART in 2009.

Results: Between January and December 2009, 3,596,201 pregnant women (4.4%) were tested for HIV and 14,772 (0.41%) were detected positive and referred to an ART centre. Of these, 7,652 (52%) received a CD4 test. Among tested women, 896 (12%) had a CD4 count < 200 and 2,772 (36%) had a CD4 count ≤350 mm³. In 2009, 1,905 pregnant women initiated ART based on these findings.

Conclusions: Nearly 36% of HIV+ pregnant women were found to be eligible for ART based on the new WHO guidelines (CD4≤350/mm³). These data are critical for programme planning, and highlight the importance of CD4 testing as an entry point to HIV care and treatment for women in India. Only half of HIV+ women detected in the PMTCT program received CD4 testing, underscoring the need to address barriers to effectively link pregnant women to both CD4 screening and HIV treatment services.

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MOPE0271
The impact of different antiretroviral regimens on prevention of mother-to-child transmission in routine practice in Cameroon (ANRS 12140-PEDICAM)
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Background: HIV mother-to-child transmission (MTCT) remains the major source of infection in paediatric populations. In developed countries, highly active antiretroviral therapy (HAART) has reduced the rate of transmission around 1-2%. In low and middle income countries, HAART was recommended for women who need treatment for their on health and simpler short courses combined ARV for the others. We assessed the effectiveness of those regimens on prevention of MTCT in routine practice in three referral hospitals in Cameroon.

Methods: Since November 2007, all neonates born to HIV infected mothers in three hospitals in Cameroon, or referred to these hospitals during the first 7 days of life, were included in the phase 1 - PEDICAM survey. They were followed up at 6, 10 and 14 weeks. HIV status was evaluated at 6 weeks and confirmed at 10 weeks for positive samples.

Results: Overall, 1470 children born to 1419 HIV infected mothers were included. HIV status was known before pregnancy for 43% of mothers. Breast-feeding was declared by 11% of mothers. Ten percent of children were lost to follow up at the first 6 weeks scheduled visit. The MTCT rate was 3.8% (95%CI:1.13/113) [59% confidence interval] which was significantly higher in neonates referred from peripheral health centres (6.4%) than those born in the three referral hospitals. Ten percent of mothers were receiving HAART at onset of pregnancy, 14% initiated HAART during pregnancy, 58% received short course regimens (AZT, AZT+3TC and NVP) and 12% did not receive any ARV. Almost all children received ARV prophylaxis. The rate increased significantly according to the maternal ARV regimen status: 0.0%, 2.8%, 4.0% and 9.9% respectively (p < 0.001).

Conclusions: Current recommendations for PMTCT are effective when they are implemented. There is need to urgent improve access to PMTCT strategies in peripheral health structures.

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Index

Abstract Book Volume 1 | www.aids2010.org
MOPE0272
Scaling up PPTCT services: lessons from India
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**Issues:** In India, the national HIV Prevention of Parent-to-Child Transmis-
sion (PPTCT) programme was initiated in 2001 in 1011 hospital centers. However, the majority of deliveries occur in rural areas, and PPTCT access remains greatly limited. In 2003, HIV antenatal testing was conducted in 400,000 of the estimated 27 million pregnancies in India.

**Description:** The National AIDS Control Organisation intensified focus on PPTCT scale-up in 2004, and by 2009 had expanded PPTCT services to 4,027 government health facilities. In 2007, NACO implemented a policy of routine provider initiated testing and counseling (PTC) for all pregnant women. The integration of PPTCT services with the Reproductive and Child Health (RCH) programme was initiated in 2008, and included expansion of PPTCT to 777 rural primary health centers. Routine implementation of PPTCT services was present to health facilities in active labor, the use of whole-blood fingerstick HIV assays in delivery wards was recently launched to further expand PPTCT coverage.

**Lessons learned:** From 2004 to 2009, the number of pregnant women tested annually in the PPTCT programme increased from 800,000 to 5.4 million, and the proportion of the estimated number of HIV+ pregnant women detected increased from 5% to 25%. Renewed national programme commitment, the implementation of broader HIV testing policies, expansion of testing services to rural areas, integration of PPTCT with existing RCH services, and the use of point-of-care testing methods have all contributed to significant increases in use of PPTCT services in India.

**Next steps:** Further integration with RCH is critical to ensure the long-term success and sustainability of the PPTCT programme. Community-based HIV testing services have been initiated to expand PPTCT coverage to pregnant women who do not access facility-based antenatal services. Strategic reduction of the proportion of PPTCT services in the private health sector remains a priority.

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MOPE0273
Analysis of perinatal HIV transmission in the State of Florida, USA from 2002 to 2009 - success and future challenges
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**Background:** Florida is second only to New York State in the number of babies born to HIV-positive women over the last 20 years. Through 2007 Florida reported 541 cumulative cases of mother-to-child transmission (MCT) of HIV. Florida has implemented several measures to reduce MCTT of HIV. These include offering "opt-out" HIV testing to all pregnant women and rapid HIV testing during labor and delivery. We analyzed cases of MCTT of HIV in Florida from 2002 to 2009 to identify missed opportunities for prevention.

**Methods:** Analysis of public records obtained from Florida Department of Health Perinatal Prevention Division. Records of 102 MCTT infections were reported over 7.5 year period from 1/2002-9/2009.52 (51%) MCTT occurred in women known to be HIV infected prior to delivery or notionally unknowingly did not take their medication or refused out right to take medications. Only 10 of 52 women received appropriate antiretroviral treatment during pregnancy. 16 of 52 women had no prenatal care. Two women only had prenatal care during the time they were incarcerated.26 of 102 were diagnosed during current pregnancy and 22 after baby’s birth. The timing of infection for one woman was unclear.33 of 102 (32%) had risk factors associated with a higher risk for HIV infection: IV drug use, sexually transmitted diseases, incarcarnation, mental illness.

**Conclusions:** While the overall numbers of MCTT of HIV remain below the range anticipated with ART (< 2% i.e. of the 607 HIV infected women who gave birth in 2008, there were 9 MCTTs (1.5%)) our analysis demonstrates several missed opportunities for prevention.Access to care, appropriate and timely testing as well as linkage to care remain crucial in the prevention of MCTT.

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MOPE0274
Feasibility and bottlenecks of highly active antiretroviral therapy (HAART) to prevent mother-to-child transmission (PMTCT) of HIV in a routine program in Cameroon
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**Background:** Single dose nevirapine at the onset of labor remains the most acceptable PPTCT of HIV in many settings though WHO 2006 guidelines rec-
commends highly active antiretroviral therapy for women in need of treatment . . . studies have concluded that delivery CS. Among vaginal and emergency CS deliveries, median duration of rupture of membranes was 2.0 hours (IQR 0.5–4.0); 18% (n=651) of vaginal deliveries involved episiotomy. The preterm delivery (PTD) (< 37 gestation

**Results:** The PTD rate declined from >25% pre-2000 to ~3% in 2008. Data on 5791 mother-child pairs enrolled in January 2008 were analysed.

**Methods:** The European Collaborative Study, a birth cohort study, started enrolling HIV-infected pregnant women and their infants in Cameroon in 2000. Women of all ages, parity, and partner status were enrolled. Of 1832 women, 1723 (93.8%) completed the study. In the analysis population, 3512/1723 (20.4%) were infected with HIV, 4% (n=224) by emergency caesarean section (CS) and 32.6% (n=1857) by elective CS. Overall 18.3% (n=1050) women were current/ex injecting drug users (IDUs). Most (62.2%, n=663) infections were delivered vaginally, 4% (n=357) by emergency CS. Among vaginal and emergency CS deliveries, median duration of rupture of membranes was 2.0 hours (IQR 0.5–4.0); 18% (n=651) of vaginal deliveries involved episiotomy. The preterm delivery (PTD) (< 37 gestation

**Conclusions:** Our findings indicate that service-oriented factors are more of a barrier to facility delivery than structural factors such as distance or cost. Additionally, it is critical to directly address misconceptions about exclusive breastfeeding and concerns about infant antiretroviral drug use in order to promote their use and enhance adherence.

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MOPE0275
Women’s perception of facility delivery, antiretroviral drug use and exclusive breastfeeding
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**Background:** In sub-Saharan Africa where most pediatric HIV infections oc-
cur, many mothers do not deliver at health facilities, remain unconcerned about the practicality of exclusively breastfeeding for the first 6 months and may have concerns about potential decreased immune protection of HIV infected infants. To effectively promote these practices which can decrease risk of infant HIV infection, additional factors that influence mothers’ perception of the use of ARVs and breastfeeding need to be identified.

**Methods:** We conducted six focus group discussions with mothers who delivered at six maternal and child health clinics in Nairobi and Western Kenya. Each group had 8-11 participants. Topics covered included hospital delivery, breastfeeding practices, and antiretroviral drug use. Two researchers analyzed the data through a process of line by line coding.

**Results:** While mothers appreciated the superior medical care available at health facilities especially if complications occurred, they viewed providers as hostile, abusive or indifferent. This was contrasted with the warm, friendly and personalized care provided by traditional birth attendants. Distance and cost of transportation or maternity services were viewed as obstacles that could be overcome if a facility was within easy reach. Mothers perceived breast milk alone to be inadequate in ensuring satisfactory infant nutrition and growth during the first 6 months. These parents cited excessively, they were thirsty, constipated and had inadequate weight gain if not given supplemental foods and water. In discussions regarding antiretroviral drug use dur-

**Conclusions:** Our findings indicate that service-oriented factors are more of a barrier to facility delivery than structural factors such as distance or cost. Additionally, it is critical to directly address misconceptions about exclusive breastfeeding and concerns about infant antiretroviral drug use in order to promote their use and enhance adherence.

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MOPE0276
Obstetric and neonatal outcomes in HIV-infected pregnant women and their infants in Ukraine
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**Background:** Ukraine has the most serious HIV epidemic in Europe, with antenatal HIV prevalence of 0.52%. The mother-to-child transmission (MTCT) rate declined from >25% pre-2000 to ~3% in 2008. Data on 5791 mother-child pairs enrolled in January 2008 were analysed.

**Methods:** The European Collaborative Study, a birth cohort study, started enrolling HIV-infected pregnant women and their infants in Ukraine in 2000. Women of all ages, parity, and partner status were enrolled. Of 1832 women, 1723 (93.8%) completed the study. In the analysis population, 3512/1723 (20.4%) were infected with HIV, 4% (n=224) by emergency caesarean section (CS) and 32.6% (n=1857) by elective CS. Among vaginal and emergency CS deliveries, median duration of rupture of membranes was 2.0 hours (IQR 0.5–4.0); 18% (n=651) of vaginal deliveries involved episiotomy. The preterm delivery (PTD) (< 37 gestation

**Conclusions:** Our findings indicate that service-oriented factors are more of a barrier to facility delivery than structural factors such as distance or cost. Additionally, it is critical to directly address misconceptions about exclusive breastfeeding and concerns about infant antiretroviral drug use in order to promote their use and enhance adherence.

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MOPE0277
Retrospective analysis of the PMTCT register from March 2008 to December 2009. Primary endpoints: uptake of CD4 count cell screening, uptake of HAART for women eligible for treatment (AOR ≥ 0.5). Success rate: 17.3% (n=1150) of women were screened for CD4 cell count of whom 312 were eligible for HAART (39%).

**Results:** 19,262 pregnant women received, 16,305 (84.6 %) tested HIV-XVI International AIDS Conference | July 18-23 2010 | Vienna, Austria

**Methods:** PMTCT intervention involving 25 maternal and child health (MCH) centers and a referral site, for treatment: HAART if CD4 cell count ≤ 350/mm3.
MOPE0277

Linking HIV-infected pregnant women to antiretroviral therapy: experience from Lilongwe, Malawi

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Background: At antenatal care (ANC), all pregnant women are routinely offered HIV-testing and counselling. HIV-infected women receive CD4 count testing and WHO staging. We describe our experiences in linking these interventions with antiretroviral therapy (ART) at the district hospital in Malawi's capital.

Methods: If eligible for ART, women are informed about the benefits of ART at ANC and asked to register at the nearby ART clinic. On women arriving, attend a one-hour education session, are re-evaluated for ART eligibility and initiated ART the same day.

Results: Between January 2006 and December 2008, 478 HIV-infected pregnant women were referred to the ART-clinic and 251 (55%) registered with 227 (87%) still pregnant at the time of registration. 156 (60%) of pregnant women registered the same day of referral, and 218 (96%) within 4 weeks. After re-evaluation, 222 out of 227 registered pregnant women were found eligible for ART. As of 31 January 2010, 175 (77%) of registered pregnant women had started ART (153 started within four weeks after registration) and their outcomes are: 105 (60%) are alive and on ART, 3 died, 25 (14%) are lost-to follow up, 11 (6%) stopped ART and 31 (17%) transferred out.

Conclusions: In our cohort, only 175 (37%) out of 478 eligible pregnant women referred for ART from ANC started ART while still pregnant - the opportunity for better PMTCT and prognosis is frequently missed. Once on ART, retention of women is better. Enhanced education and information as well as active tracing may improve outcomes.

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MOPE0297

Early impact of extended prophylaxis with Nevirapine on HIV acquisition among infants in Rural Rakai, Uganda

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Background: WHO recommends use of extended infant prophylaxis with nevirapine (NVP) as one strategy for the prevention of breast milk mother-to-child (pMTCT) HIV transmission. We evaluated the impact of extended NVP prophylaxis for pMTCT at six weeks of age using data from the Rakai Health Sciences Program, Uganda.

Methods: We compared the proportion of infant HIV acquisition at six weeks of age among breastfeeding mothers who were not on ART during the following three periods: 2002/2007 when mothers and infants only received single-dose NVP (sdNVP), mid-2007/2008 when mothers received zidovudine (AZT) starting at 28 weeks of pregnancy and sdNVP for mother and baby, and mid-2008/2009 when mothers and infants received the mid-2007/2008 regimen plus infant prophylaxis with NVP during lactation.

Chi-square tests for trend was used to compare proportion of infants with HIV-infection over the three periods.

Results: Excluding mothers who were on ART, 164 mother-infant pairs were seen in 2002/2007 period, 38 in the mid-2007-2008 period, and 82 in the 2009-2010 period. The six-week infant infection rates were 11.0% (18/164) in 2002/2007, 2.6% (1/38) in mid-2007/2008 period and 1.2% (1/82) in the mid-2008/2009 period (p = 0.005).

Conclusion: Extended infant prophylaxis with NVP reduced infant HIV acquisition. Scale-up of extended NVP prophylaxis has the potential to substantially reduce perinatal and breast milk HIV transmission.

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MOPE0280

Predictors of CD4-eligibility for ART among pregnant HIV-infected women in urban Zambia

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Background: The World Health Organization recommends pregnant women whose CD4 count is 350 or less start antiretroviral therapy (ART). In resource-limited settings, availability of CD4 testing is a barrier to ART initiation in pregnancy.

Methods: We studied a cohort of HIV-infected pregnant women in Lusaka, Zambia to determine clinical characteristics associated with having a CD4 count < 350. We used logistic regression to identify predictors of CD4 count < 350 and calculated the sensitivity, specificity, and misclassification (based on positive and negative predictive values) for individual characteristics and multistatistics of characteristics to predict CD4 count < 350. The best-performing algorithm had the lowest misclassification.

Results: 22,661 HIV-infected pregnant women with CD4 counts were available for analysis. Of these, 10,941 (48.3%) women had a CD4 count < 350. In an adjusted analysis, the following maternal characteristics were associated with ART-eligibility: age ≥ 30 years (adjusted odds ratio [AOR]: 2.30, 95% CI: 2.00-2.63); BMI < 19.8 (AOR: 1.33, 95% CI: 1.15-1.54); history of tuberculosis, AOR 1.48, 95% CI (1.21-1.82); hemoglobin < 10 (AOR: 1.87, 95% CI: 1.54-1.82); and history of child death < 1 year (AOR: 1.65, 95% CI: 1.42-1.90). The best-performing model to predict CD4< 350 (any 1 of the above 5 clinical determinants present) had a sensitivity of 61.7%, specificity of 50.2%, positive predictive value of 54.1%, negative predictive value of 57.9% and misclassification of 44.2%. In comparison, a simple model that assumed all HIV-infected pregnant women had a CD4 count < 350 had only a marginally different misclassification rate (51.2%) with a sensitivity of 100% and specificity of 0%.

Conclusions: In this large cohort, no clinical maternal characteristics or clusters of characteristics performed well at predicting CD4 eligibility for ART. CD4 triage is a critical element of maternal care and PMTCT. Donors and governments should invest in making point-of-care CD4 testing more widely available.

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Exhibition

Tuesday 20 July

Author Index

118

Abstract Book Volume 1 | www.aids2010.org

MOPE0281

Neuprotnea, anemia and skin-rash among HIV exposed infants receiving nevirapine and cotrimoxazole compared to cotrimoxazole prophylaxis alone


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Background: In December 2009, WHO issued Rapid-Advice for HIV-exposed/uninfected (HIV-EU) infants to receive daily nevirapine (NVP) prophylaxis from birth until one week after all exposure to breastmilk is stopped. Given that HIV-EU infants receive cotrimoxazole (CTX) prophylaxis from 6 weeks of age, there is concern of potential increased hematologic toxicities with prolonged exposure to both drugs.

Methods: The Simla database was modified to version2.0, a phase IIIA, randomized, placebo-controlled trial assessing efficacy and safety of daily NVP prophylaxis given to breastfeeding infants from birth to 6 months. In addition, all infants received standard-of-care single-dose NVP (SDNVP) at birth, +1/week zidovudine; and daily CTX prophylaxis starting at 6 weeks. Eligible Ugandan and Zambian HIV-infected pregnant women were recruited after 28 weeks gestation; mother/infant pairs followed through 18 months. Infant assessments were done at birth, 6, 8, and 10 weeks; and 6, 12, and 18 months. The DAIDS Toxicity Tables 2004, and a supplemental Cutaneous/Skin-Rash Table were used for severity grade assessments of Adverse Events. A Cox model (time to first event after 6 weeks) was used.

Results: There was a sharp decrease in absolute neutrophil counts at 6-8 weeks of age in HIV-EU infants with at least one episode through follow-up of NVP (grade ≥3); anemia (grade ≥3); and skin rash (grade ≥2) for NVP/CTX versus CTX arms were: 29%/641%/0.073% vs 26%/12% (p=0.014) and 6%/1% (p=0.565) respectively. After 6 weeks, time to event was similar in NVP/CTX versus CTX arm: neutropenia (grade ≥3), (Hazard ratio (HR) = 0.92, 95% Confidence Interval (CI): 0.53-1.59)); anemia (grade ≥3), HR=2.29, 95% CI: 0.95-5.44; skin-rash (grade ≥3), HR=0.95 (95% CI 0.41-2.47).

Conclusions: Using US based Toxicity Tables; severe neutropenia and anemia are common among these HIV-EU infants. However, extended NVP prophylaxis among infants receiving prolonged CTX prophylaxis did not appear to increase the risk of toxicities.

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Conclusions: Although large gains in PMTCT service delivery have been achieved, there remain many challenges. Greater attention needs to be paid to the social factors that limit women’s abilities to access services and adhere to feeding guidelines. Although exploratory, our analyses suggest that reductions in HIV-related stigma could have an important role in reducing vertical HIV transmission.

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MOPE0283

Married women don’t use condoms: an analysis of population-based data to understand PMTCT knowledge and practice

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Background: ‘Knowing your epidemic’ and response will shape future investments in HIV, especially the prevention of mother-to-child transmission (PMTCT). Since 2005, this knowledge is derived primarily from health facility-based data gathered by UNICEF, WHO and UNAIDS, bypassing rich population-based data sources. We used population-based data to measure knowledge, access and utilization of PMTCT services.

Methods: We analysed Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) collected between 2002 and 2007 in 60 low and high prevalence countries to generate PMTCT knowledge and practice according to epidemic typology. Bivariate and logistic regression methods were used for the analysis.

Results: In high-prevalence countries in Africa, condom use among women ranges between 3-24% in cohabiting/married women and is highest among unmarried/single women and younger women. Male sexual partners. Women’s knowledge of MTCT is associated with wealth and urban residence, and low-prevalence countries demonstrate a range (8% in Iraq to >73% in Uzbekistan) that is comparable to high-prevalence countries (25% in Ethiopia to >73% in Haiti); levels of knowledge vary widely by country. Women who know about ARVs for MTCT are between 85% (Haiti) and 270% (Benin) more likely to have been offered an HIV test. Of countries with sufficient data, when testing is offered, acceptance rates are >60%, with Zambia and Cambodia having the highest levels, and Niger, the lowest.

Conclusions: The association of low condom-use with being married poses a challenge, particularly in high-prevalence countries. PMTCT and MTCT knowledge is not linearly associated with epidemic type or sex (associated with exposure to antenatal care), suggesting that various factors mediate knowledge. The skew of knowledge being offered an HIV test toward urban residence suggests that a decentralized approach to PMTCT is needed. If made more accessible, evidence indicates that the majority of women will accept HIV tests.

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MOPE0282

Stigma as an important barrier to universal access to PMTCT: model projections

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Background: Uptake and adherence to PMTCT programmes remains a challenge in many settings. Fear of HIV-related stigma has been documented as a barrier for women accessing and adhering to PMTCT. To quantify its potential impact, we developed a model to estimate the impact of stigma on PMTCT programmes and vertical transmission.

Methods: A detailed literature review on stigma and potential impact on PMTCT was conducted. A spreadsheet model was developed, incorporating inputs on the proportion of women completing different steps in the PMTCT cascade. The model estimated the impact of infant infections occurring for different assumptions about the levels of stigma (‘none’, ‘low’, ‘medium’, ‘high’), and its impact on uptake and adherence to testing, medication and exclusive breastfeeding. Calculations were repeated for different assumptions about the underlying strength of the health system (stronger, weaker), and HIV prevalence (5%, 10%, 15%).

Results: Our modelling suggests that effective stigma reduction programs could have important impacts on vertical transmission. In settings with strong PMTCT services and high levels of stigma, a large percentage (55%) of vertical infections could be due to stigma. In settings with less strong programmes, a third of vertical transmission may be due to stigma.

Conclusions: Although large gains in PMTCT service delivery have been achieved, there remain many challenges. Greater attention needs to be paid to the social factors that limit women’s abilities to access services and adhere to feeding guidelines. Although exploratory, our analyses suggest that reductions in HIV-related stigma could have an important role in reducing vertical HIV transmission.

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MOPE0284

HIV-1 vertical transmission in Central West Brazil: epidemiological, clinical and antiretroviral resistance profiles

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Background: HIV-1 mother-to-child transmission (MTCT) is multifactorial, but high maternal viral load at delivery represents a major risk factor. Antiretroviral (ARV) prophylaxis alone does not reduce MTCT, however drug resistance mutations may contribute to higher MTCT risk.

Objective: To investigate HIV-1 MTCT among mother-infant pairs from Central West Brazil.

Methods: Pregnant women were followed-up until delivery; newborns were monitored until the definition of HIV-1 diagnosis. Maternal viral loads, CD4+ T cell counts and drug resistance profiles were assessed. HIV-1 exposed infants had viral loads and CD4+ T cell counts determined at 30, 120 days; HIV-1 ELISA tests were performed at 1, 4, 12 months until seroconversion, Protease/PR, partial Reverse Transcriptase/RPT genes were PCR-amplified and sequenced from plasma RNA. PR/RT mutations were analyzed by the Stanford Database/International AIDS Society-USA list.

Results: Pairs of HIV-1-infected mothers/exposed infants (n=126) were enrolled between June/2008-January/2010. Maternal median age was 26 years, 8.7% were (n=11) ≥ 19 years old. Heterosexual transmission predominated (87.3%). 46 women were diagnosed during pregnancy; 93.6% (n=118) had access to HAART. 85.3% (n=110) received intraveneous AZT during labor; 50.8% (n=64) had cesarean section. Among AIDS mothers (n=19) the medians of CD4+ T cell counts and viral loads were 376 cells/mm3 and 9,018 copies/ml respectively. Among asymptomatic mothers the medians of CD4+ T cell counts and viral loads were 643 cells/mm3 and 7,719 copies/ml respectively. HIV-1 MTCT occurred in 2.38% (3/126) exposed infants; in one case, mother’s diagnosis was post-partum (viral load>2,840 copies/ml); the other 2 mothers received ARV prophylaxis and had viral loads below 1000 copies/ml (undetectable/1,862 copies/ml). The 3 pairs of HIV-1 transmitting mothers/infants had ARV susceptible viruses; 2/3 HIV-1 infected children were delivered vaginally.

Conclusion: In this cohort, HIV-1 MTCT occurred among mothers with low viral loads, ARV resistance was not associated with transmission and vaginal delivery probably represented the major risk for HIV-1 MTCT.

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MOPE0285

Prevention of mother-to-child transmission (MTCT) of HIV/AIDS, syphilis and Chagas disease in the Northwestern provinces, Argentina

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Background: A comprehensive prevention program is developing in low-income neighborhoods of Jujuy and Salta, at Northwestern region, one of the poorest of the country. Before the beginning of the program a baseline study was carried out to identify gaps related to MTCT of AIDS, Syphilis and Chagas disease.

Methods: Personal domiciliary survey was applied among reproductive age women (n=567) residing in the intervention areas. Sampling error: +/- 5.6% for symmetric distributions and CI 95%.

Results: 82.9% of reproductive age women were pregnant, 27% in the last two years. The pregnancy mean is 3.45. 20.2% of women had at least one abortion. 73.4% of recent pregnant women sought pre-natal care during first trimester. Contraceptive mean was 66.7%. 81.5% of women had at least 5 minimum recommended visits. 76% had been tested for HIV during their last pregnancy; 43.5% during the first trimester; 49.5% during the second and 6.9% during the third trimester. 83.3% had been tested for syphilis and 50.6% for Chagas. There were no cases of Syphilis and there were 7 of Chagas (prevalence 8.6%). 70% didn't receive preventive information with the HIV test result. Regarding the pregnant women's knowledge they identify as contraceptive methods: pills (79.9%), condom (76.1%) and IUD (54.8%). As sexually transmitted disease (STD) and HIV prevention methods 93.1% named condoms. Among HIV transmission ways: 88.1% identified vaginal sex, 33.9% anal sex, 12.5% oral sex and 17.1% MTCT during the pregnancy, 10.1% during delivery and 9.4% during breastfeeding. Known STDs were: HIV syphilis 82.8%, Syphilis 63.5% and Herpes Simplex 12.6%.

Conclusions: This baseline provides substantial information for the program focal points related to sexual and reproductive health prevention and pregnancy care, especially abortion, MTCT prevention and quality of VCT services in HIV, Syphilis and Chagas.

Program supported by an unrestricted grant from Pfizer Inc.

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MOPE0286

Virtual elimination of mother-to-child transmission of HIV in adolescents and middle-income countries: achievements, missed opportunities for improving program effectiveness and the way forward

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Issues: Low- and middle-income countries have demonstrated tremendous progress in scaling-up services for preventing mother-to-child transmission of HIV (MTCT). However, 20% of adolescents and 70% of middle-income countries (MIC) received antiretrovirals for PMTCT up from 10% in 2004. However more significant progress is still needed and success of the global response will largely depend on performance of 20 countries accounting for 89% of 1,400,000 PWLHIV worldwide and 90% of the global gap towards reaching 80% coverage of PMTCT services.

Description: The abstract describes accessibility, utilization and quality of PMTCT services and the missed opportunities for averting new paediatric HIV infections in adolescents and middle-income countries. The countries have increased facility-based coverage of PMTCT services by 77% from 13048 facilities in 2004 to 23070 in 2008. Population based uptake of PMTCT services was also expanded from 189,137 (15%) to 550,426 (44%) PWLHIV reached by antiretrovirals in the same period. However the progress should be assessed with cautious optimism. Only 3 of the 20 countries are on track to meeting UNGASS target by 2010. In 2008 5 out of 20 countries were still predominantly providing single-dose NVP for PMTCT. Only 35% of PWLHIV were screened for ART eligibility (clinical or CD4) to identify mothers with the highest risk of perinatal HIV transmission. Antiretrovirals for PMTCT has reached only 31% of infants born to PWLHIV. In those countries with available data only 13.5% of children born to PWLHIV were reached by PCR testing by 2 months, that both ensures early identification of HIV-infected infants and is a critical preventive intervention to inform infant feeding choices.

Lessons learned: Virtual elimination of MTCT of HIV requires refocusing on these missed opportunities to improve coverage, quality and effectiveness of program services.

Next steps: This work will inform strategic planning and implementation efforts for strengthening PMTCT responses in resource-limited settings.

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MOPE0287

Five-year trends in epidemiology and prevention of mother-to-child HIV transmission, St. Petersburg, Russia, 2004-2009

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Background: The HIV epidemic in Russia, initially highly concentrated among injection drug users (IDU), has increasingly involved reproductive-age women and threatened increase in mother-to-child HIV transmission.

Methods: We used perinatal HIV sentinel surveillance data collected for all HIV-infected women giving birth in St. Petersburg, Russia, between 2004 and 2009 to assess changes in the prevalence of injection drug use and in the distributions of social, perinatal, and clinical factors influencing mother-to-child HIV transmission for IDU and non-IDU. The Cochran-Armitage trend test was used to identify significant changes in these factors during the assessment period.

Results: Among 2,485 HIV-infected women who gave birth during the study period, the proportion of IDU decreased from 62% (n=343/554) in 2004 to 41% (183/447) in 2009 (p<0.0001). Implementation of the following clinical services increased from 2004 to 2009 (all p<0.01): initiation of antiretroviral prophylaxis 23 weeks gestation (IDU: 44% to 64%; non-IDU: 45% to 72%), immunologic (CD4) monitoring (IDU: 48% to 64%; non-IDU: 58% to 80%), viral load monitoring (IDU: 8% to 58%; non-IDU: 10% to 79%), and multiple antiretroviral prophylaxis (IDU: 9% to 44%; non-IDU: 14% to 59%). At the same time, the proportion of women without prenatal care and the proportion without known HIV status prior to labor and delivery did not change significantly during the assessment period for either group. Observed reductions in the rate of perinatal HIV transmission during the assessment period were non-significant: overall, 7.0% (CI 5.4%-9.0%) and 4.0% (CI 2.6%-5.8%) among IDU and non-IDU, respectively.

Conclusions: The proportion of IDU among HIV-infected women giving birth decreased significantly from 2004 to 2009. Clinical services for HIV-infected women giving birth who accessed prenatal care, including IDU, significantly improved. Further reduction of mother-to-child HIV transmission may be achieved by increasing outreach and widespread opt-out HIV testing of women before and during pregnancy.

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Male and female condoms and other physical barriers

MOPE0288

Off label use of the female condom for anal sex

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Background: Female condom (FC) has been approved for vaginal use by the U.S. Food and Drug Administration in 1993, but it has neither been evaluated nor approved for use during anal intercourse.

Methods: We conducted a cross-sectional, self-administered survey among 11 men visiting an HIV/AIDS service organization in New York City in 2008-2009. We estimated the prevalence of anal use of the FC in this sample and used logistic regression to identify predictors of this off-label use.

Results: Participants were 18-57 years old; 42% were Black, 32% White and 35% Hispanic. Participants identified their sexual orientation as homosexual (72%), bisexual (15%), heterosexual (5%), or other (4%). The lifetime prevalence of anal use of the FC was 17%, and active prevalence (past 6-months) was 14%. Of those who had used the FC during anal intercourse, 78% had used it with only male partners, 11% with only female partners, and 11% with both male and female partners. Sixty-four percent reported removing the inner ring at last use.

After adjusting for demographic characteristics (age, race, ethnicity, income, education, and sexual orientation), men who had used the FC for vaginal intercourse had a significantly higher odds of using it for anal intercourse (OR=12.7, p=0.002). Men who rated the male condom as excellent for disease protection also had a higher odds of FC use during anal intercourse that was of borderline significance (OR=3.2, p=0.055). Men who reported that the male condom has a very negative impact on pleasure during anal sex had a higher odds of FC use, but it was not significant (OR=4.2, p=0.163).

Conclusions: Given that some couples are already experimenting with anal use of the FC, the safety and efficacy of this use must be evaluated so couples can make informed choices.

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MOPE0289

Effect of awareness on service delivery projects on use of condoms among male and transgender sex workers in Multan and Rawalpindi, Pakistan

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Background: In June 2006, the Pakistan HIV/AIDS Prevention and Care Project (PHACP) was initiated to provide HIV prevention and sexual health services to male sex workers (MSWs) and transgender sex workers (TSWs). An attitude assessment survey was conducted from January to February in March 2008 to evaluate the effect of provision of service delivery on use of condoms among commercial anal sex.

Methods: A cross-sectional survey selected MSWs and TSWs from Multan and Rawalpindi through two stage cluster sampling. After obtaining informed consent, socio-demographic and behavioral data were obtained through face-to-face interviews using pre-coded questionnaires. Study participants were also asked about various service delivery projects in their city. Data from both cities were exclusively provided by PHACP.

Results: MSWs sample sizes were 309 and 185 and, for TSWs, 142 and 264 in Multan and Rawalpindi respectively. Condom use during last receptive commercial anal sex was 23.9% and 28.3% among MSWs and TSWs in Multan respectively, and 33.1% and 31.4% among MSWs and TSWs in Rawalpindi respectively. Multivariable logistic regression analysis showed that the likelihood of condom use during last receptive anal sex with a client increased for both MSWs and TSWs who were aware of service delivery projects compared to those who were not in Multan (MSWs: adjusted OR 2.41 95%CI 1.39, 4.19; TSWs: adjusted OR 8.02 95%CI 3.03, 21.27) and Rawalpindi (MSWs: adjusted OR 5.00 95%CI 1.97, 12.70; TSWs: adjusted OR 2.39 95%CI 1.09, 5.31) after adjusting for age, monthly income and educational status.

Conclusions: Condom use during last receptive anal sex with clients showed significant increases for those MSWs and TSWs who were aware of service delivery projects in both cities. The strength of association was high for MSWs in Rawalpindi and TSWs in Multan.

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MOPE0290

Negotiating condom use in marital relationships: the case of KwaZulu-Natal, South Africa

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Background: In mature generalised HIV epidemics, the majority of new infections occur within marital or cohabitating relationships due to prior infection or because of the nature of spousal intimacy. For couples in transitionary roles, the aim of this study is to try and assess in some details the factors contributing to condom use and also, some of the barriers to consistent condom use in marital relationships.

Methods: The study draws on a combination of qualitative and quantitative data. The quantitative data comes from two cross sectional surveys conducted among married and cohabitating couples in KwaZulu-Natal, South Africa in 1998 and 2008. The qualitative data was collected from in-depth interviews with couples.

Results: The findings of the study suggest that consistent condom use in marital and cohabiting unions is increasing - from 4% in 1998 to 12% in 2008. However, condom use was higher in the urban than the rural areas. Women were more likely to report using another more effective method of contraception for protection against pregnancy. Women in particular expressed concern that she may alienate her partner and therefore were more likely to insist on condom use in their marital and/or cohabitating relationships. However, condom use was the main challenge. Few men and women reported using condoms consistently with their married and/or cohabitating partners. Females who were HIV-positive had a greater odds of using condoms consistently (the odds ratio was 11.65 for men and 35.0 for women).

Conclusion: However the central message is more positive and challenges widely held views that resistance to condoms within marriage is immutable. More emphasis should be placed on encouraging HIV prevention programmes to focus greater attention on reducing the risk of HIV infection among married and cohabiting couples by promoting consistent condom use.

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MOPE0291

Free condom distribution strategy - Kenyan experience

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Issues: Kenya Demographic and Health Survey 2008/2009 Preliminary results revealed that of respondents who in the last 12 months had sex with two or more partners, only 32 percent of women and 37 percent of men reported using a condom.

Discussion: Promotion being a principle aim in the 2005-2010 Kenyan National HIV and AIDS Strategic Plan in reducing HIV infections, provision of consistent condom use to those most in need remains challenged by factors like, the social stigma/embarrassments associated with the procurement and use of condom, provider bias, ready physical access, poor appeal in packaging. Another reason is due to need for reproductive health education continues to prove limiting due to stigma associated with seeking services there, coupled with approaches that are peer model of educational sessions provide for more understanding and reach.

Description: Embu District Youth Development Initiative works by that primary intervention of enhancing free condom and education sessions in coordination with Government, through the Nasco, civil society organizations and NGOs aligning towards HIV/AIDS prevention programmes.

Through its network of 50 youth led organization it provides targeted condom distribution for rapid provision on the fundamental necessity for making condoms readily available when /where people need them. It has availed up to 40 Cartons of 4800 pieces each from April 2008 to date.

Lessons Learned:
- To access to condoms for youths should be enhanced accompanied by health educational programs.
- Condom distribution programmes can operate on a fairly large scale in resource poor environments.
- Reaching men with effective condom promotion messages is key in communities where sexual decision making is male dominated.

Next Steps: Treatment remains an essential component of comprehensive HIV/AIDS programmes; However, condom promotion should be enhanced as a strategy and part of a package of comprehensive primary HIV prevention through behaviour change.

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MOPE0292

Protection versus pleasure: reduced sensation as a deterrent for condom use among immigrant Latino MSM living in the USA

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Background: Unprotected anal intercourse (UAI) is often motivated by a desire for greater physical pleasure and partner intimacy relative to sex with condoms. Condom usage commonly involves a cost-benefit analysis in which these potential gains are weighed against potential risks, which vary by HIV status, sexual roles, and sexual partners. We examined the impact of perceived pleasure loss related to condoms on participation in insertive and receptive UAI within this context.

Methods: 482 Dominican, Colombian, and Brazilian, immigrant MSM were surveyed regarding their attitudes and sexual practices via A-CASI. Participants rated the pleasure they derived from protected and unprotected sex in each role (insertive and receptive). Discrepancy scores were calculated as indicators of the pleasure loss associated with condom use in each role within the subsamples of participants who had previously engaged in those roles both with and without condoms [(insertive)=297; (receptive)=284]. Separate logistic regressions were conducted for each group to evaluate perceived pleasure loss, serostatus, and relationship status in relation to UAI over the last 3 months.

Results: Analyses revealed a positive relationship between perceived pleasure loss and likelihood of UAI for both insertive and receptive roles. Additionally, participants were more likely to engage in receptive UAI if they had a main partner. Serostatus was not significantly related to UAI.

Conclusions: Findings indicate that the pleasure loss associated with condoms may be a primary deterrent for their use in either sex role among Latino MSM, regardless of serostatus. However, the main effect of partner status on receptive UAI suggests men may limit their participation in the riskier of the two roles outside of a relationship context. These results support the need to maximize the pleasure-enhancing properties of condoms and develop alternative methods of HIV prevention that do not stifle physical sensation (e.g., rectal microbicides).

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MOPE0293

Female condom use among sex workers in rural China: who are the users?

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Background: The Women’s Health project aims to assess female condom (FC) use among women sex workers in different types of sex establishments in typical rural and small urban towns in southern China. We report on two rural towns in Hainan Province.

Methods: Intervention included two 6-month phases of outreach to sex establishments by local health care providers to educate, demonstrate use and deliver FC. Three cross-sectional surveys conducted pre, during (6 months after) and post-intervention (12 months after) evaluated the intervention. Ethnographic observations and interviews documented sex industry context and reasons for FC use/non-use. Data from the subsamples of participants (n=57 and 12- and 12-month surveys revealed differences between FC users (used more than once) and non-users (heard of but did not use or tried only once) and factors related to use.

Results: Women participating in the 6-m (n=154) and 12-m (n=152) surveys were recruited from 12-15 sex establishments and received FCs. Women were more likely to report using another more effective method of contraceptives (e.g., oral contraception) in the subsamples of participants who had previously engaged in those roles both with and without condoms (n(insertive)=297; (receptive)=284). Separate logistic regressions were conducted for each group to evaluate perceived pleasure loss, serostatus, and relationship status in relation to UAI over the last 3 months.

Conclusions: Findings indicate that the pleasure loss associated with condoms may be a primary deterrent for their use in either sex role among Latino MSM, regardless of serostatus. However, the main effect of partner status on receptive UAI suggests men may limit their participation in the riskier of the two roles outside of a relationship context. These results support the need to maximize the pleasure-enhancing properties of condoms and develop alternative methods of HIV prevention that do not stifle physical sensation (e.g., rectal microbicides).

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MOPE0294

Improving the access to male and female condoms in South Africa as part of a comprehensive approach to achieve sexual behaviors changes

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Issues: The Need Assessment carried out in 2008 has highlighted key issues: public health centers are considered as the more appropriate place for condom provision (MC and FC); limited financial and human resources as well as work overburden affect seriously public health condom provision and in Ministry of Health (MoH) authorities as well as in health sector providers is not observed an ownership about double protection offered by condoms, otherwise persist a divorce between family planning and STI/HIV prevention strategies.

Description: Based in the need assessment results, in 2009 the MoH in alliance with UNFPA have designed a National Action Plan to improve the access to condoms and to include female condom in the public offer, involving key stakeholders at national and regional level. The plan aims to improve the use of condoms as a mean of dual protection to achieve sexual behaviours changes. The plan proposes several lines of action: institutional planning and programming, changes in legal and regulatory framework, capacity building and communication and advocacy activities. The plan also includes a set of indicators to monitor and report the process in the course of implementation.

Lessons learned: The incorporation of the initiative in both Sexual and Reproductive Health and HIV/AIDS Strategy of the MoH is an innovative component in the implementation of the female condom in peruvian health system.

Next steps: To design the road map to start the distribution of female condoms in family planning and STIs/HIV and AIDS services, in 4 areas selected by the Ministry of Health South Lima, Callao and Lima, to strengthen health care providers skills, to design protocols, monitoring the distribution and to disseminate the new method among the potential users.

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MOPE0295

Change in barrier method use after an HIV prevention trial in Zimbabwe

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Background: We examined the effect of intensive promotion of male condoms and the diaphragm on use of these methods after MIRA trial completion. We compared nine MIRA communities to a diaphragm group (receiving dia- phragm, gel, male condoms), or a condom-only control group; they received product-specific counseling quarterly during the trial, and, at exit, were all offered the diaphragm and condoms.

Methods: 801 Zimbabwean MIRA participants completed one post-trial visit (median lapse = 9 months). We assessed condom, diaphragm, and any barrier method use at the last sex act at the final MIRA and post-trial visits, and used multivariable random effects logistic regression to examine changes in method use.

Results: In the condom group, condom use was 86% at last trial visit and significantly decreased post-trial. In the diaphragm group, condom use was 61% only, but did not change significantly post-trial. Diaphragm use decreased to 50% post-trial. Any barrier method use significantly decreased post-trial nonetheless, it was reported by 3/4 of women.

Condom group (N=381)

<table>
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<tr>
<th>Last trial visit %</th>
<th>Post trial visit %</th>
<th>Adjusted OR</th>
<th>95% CI</th>
<th>pval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male condom use at last sex</td>
<td>86</td>
<td>67</td>
<td>0.20</td>
<td>0.12-0.33</td>
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<td>Any barrier method at last sex</td>
<td>89</td>
<td>74</td>
<td>0.21</td>
<td>0.12-0.35</td>
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Diaphragm group (N=420)

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<th>Last trial visit %</th>
<th>Post trial visit %</th>
<th>Adjusted OR</th>
<th>95% CI</th>
<th>pval</th>
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<tbody>
<tr>
<td>Male condom use at last sex</td>
<td>61</td>
<td>56</td>
<td>0.77</td>
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<tr>
<td>Any barrier method at last sex</td>
<td>79</td>
<td>50</td>
<td>0.18</td>
<td>0.12-0.28</td>
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<td>Diaphragm use at last sex</td>
<td>94</td>
<td>75</td>
<td>0.15</td>
<td>0.08-0.27</td>
</tr>
</tbody>
</table>

Discussion: High condom use levels were not sustained post-trial in the condom group. While change in condom use differed by study group, use of any barrier method remained highest post-trial and was similar in both groups. Post-trial acceptability of this “novel” method in the diaphragm group. Our findings underscore the potential benefit of providing women with a mix of methods.

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MOPE0296

Provision of flavored condoms to women in an HIV prevention trial in Southern Africa: acceptability and uptake

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Background: Consistent male condom use to prevent heterosexual HIV ac- quisition is notoriously difficult to achieve. During a multisite HIV prevention trial of the diaphragm in Southern Africa (MIRA), one year after trial initiation, we purchased (US$.10/condom) and provided a limited supply of flavored male condoms (FMC), as a strategy to encourage condom use and visit reten- tion. Twelve FMC/participant, per quarter, and unlimited standard male con- doms (SMC; obtained free) were dispensed for the trial remainder.

Methods: We examined condom use and attitudes quantitatively among 3571 sexually active women (median 14 sex acts/month) who received a structured interview at Exit and qualitatively among 215 women and 31 of their male partners in 34 Exit Focus groups and 10 in-depth interviews. Using women’s self-report of condom use at last sex, we compared the aggregate level of condom use before and after FMC provision.

Results: At Exit, 94.6% of participants reported FMC use, 72.4% preferred FMC to SMC, and 71.0% perceived their partners felt the same. Additionally, 43.7% said the FMC had increased their overall frequency of condom use. However, time-trend analysis showed no detectable increase in condom use associated with provision of FMC in this subgroup or in the overall sample. Qualitative data from men and women suggested a notable preference for FMC due to improved smell, thickness, sensitivity and oil-content. For many, FMC increased the “fun” and pleasure of sex, and were perceived as “strong- er” than SMC.

Conclusions: Men and women enthusiastically received FMC and preferred them to SMC. While there was a perception among a substantial minority that FMC increased use, our quantitative analyses of use did not detect this, perhaps because we only provided limited supplies of FMC. Provision of FMC should be further explored as a strategy to increase condom use in Africa while assessing their cost-effectiveness and impact on use of SMC. Presenting author email: emontgomery@rti.org

MOPE0297

Collaborating with religious leaders in the promotion of condom use in Rwanda

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A. Ntwali Gasozi


Issues: Rwanda is a predominantly a religious conservative society. The Rwanda Interfaith Network against AIDS (RCLS) is one of the 7 Umbrella organisations of the Rwanda National AIDS Control Commission (NACC) that groups religious entities in the fight against HIV/AIDS. Increasing accessibility to quality condoms, demand and addressing barriers to condom use is a key priority output for the National Strategic Plan (NSP 2009-2012).

Description: Under the National theme for the 2009 WAD campaign: “Con- doms as a means for dual protection. Let’s talk about it, let’s access it, let’s use it: a fundamental right for all”, NACC collaborated with RCLS to conduct public mass mobilization, sensitizations and distribution of condoms to the public through collective efforts by different religious entities. Testimonies by some participants showed that people used condoms regardless of their religious doctrines owing to their knowledge about HIV prevention and Reproductive Health benefits. It was also evident that people’s freedom to talk about and use condoms depended on their religious leaders’ knowledge and attitude towards condom use and especially their approach towards the prevention of HIV infection and promotion of Reproductive health values.

Next steps: The NACC together with RCLS will continue to find friendly means of targeting people in different religious entities to promote condom use. More efforts will be invested in strengthening the capacity of RCLS to reach out to the big number of people through forging collaboration with different religious entities in the fight against HIV/AIDS.

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MOPE0298
Male condom use among HIV sero-discordant couples, both where the HIV+ partner is on and not on ART in TASO Jinja, Uganda

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Background: HIV serodiscordant couples are among the most at-risk for HIV transmission in sub-Saharan Africa. As such, we need to evaluate risky sexual partnership patterns and ART use as HIV prevention among HIV serodiscordant couples.

Methods: In a prospective cohort of 246 HIV serodiscordant couples enrolled at TASO Jinja, participants completed baseline interview questionnaires. Participants were 21+ years, in a stable relationship (≥6months) and were sexually active. We compared condom use at last sex among male participants, both where the HIV+ index was on/not on ART

Results: In bivariate analyses, 54% (n=96) of the HIV+ index participants were male and 46% of male ART users. Older age (years) of both men (median age=44, [IQR: 39-50] vs 40 [33-47]) and their female partners (median age=41 [IQR: 36-48] vs 37 [IQR: 30-43]) were associated with more condom use at last sex, as was higher median age of sexual debut among men (18 [IQR: 16-19] vs 17 [IQR: 15-18]; p=0.014). Contraceptive usage by female partner (IUD, injection or oral) was associated with reduced male condom use (8% vs 17%, OR=0.41 [95%CI: 0.18-0.93]) only to use a condom at last sex (61% Vs 39% p = 0.094) than HIV negative men with HIV+ female partners. A lower CD4 cell count (median=53 cells/μL [IQR: 33 - 106] vs 200 cells/μL; 99 – 308), p = 0.070 and recent initiation of ART use within the last 24months (p=0.073) were marginally associated with male condom use.

Conclusions: The results highlight the need to implement HIV interventions for boys and young couples. Contraceptive usage in reducing male condom use amongst adolescent girls and young women in scale up reproductive health programs within HIV care. While continued longitudinal evaluation is needed, it supports evidence of early ART initiation in promoting increased male condom use for prevention.

MOPE0299
Breaking down the price of the female condom

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Issues: The female condom is the only female-initiated prevention method that protects against pregnancy and STIs, including HIV. Yet, the female condom is not widely available. Accessibility of female condoms is hampered by the current price. The Universal Access to Female Condom (UAFC) Joint Programme aims at making the female condom available, accessible and affordable for all through price reduction and increase of market competition.

Description:
1. As the FC2 is the only female condom approved by WHO, its manufacturer has a dominant position on the market. If other manufacturers will enter the market, the price is expected to decrease.
2. The price of the female condom depends on the scale of the procurement. The female condom is priced per 1000 pieces by WHO at USD $0.57 and by the manufacturer at USD $1.05 per piece. More effective procurement management could reduce the cost of the female condom.

Lessons learned:
1. Urgent investment in WHO approval is required to support new manufactures to enter the market.
2. Pooled procurement can save up to 50%; an example is the UAFC country programmes in Nigeria and Cameroon which saves 2.6 million $.
3. Through demand creation programs, sales of female condoms are increasing on ART. More price reduction is needed.

The next steps within the UAFC Joint Programme are:
1. Support new manufactures to get WHO approval
2. Advocate for more comprehensive financing
3. Share best practices on female condom programming.

MOPE0300
Dual Protection to meet family planning and HIV prevention needs in Zimbabwe

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Issues: Of one million adults living with HIV in Zimbabwe, 61% are women. Dual protection (DP), the concurrent use of condoms and other modern contraceptive methods, is effective in preventing unintended pregnancies in HIV-positive women—thus preventing mother-to-child transmission of HIV—and prevents HIV and STIs in the infected. Knowledge and use of DP among women ages 15-29 is low in Zimbabwe.

Description: Population Services International (PSI) manages HIV testing and counseling (HTC) services reaching over 35,000 Zimbabweans each month; 56% of clients are women and 18% are couples, of whom 11% are sero-discordant. PSI also manages post-test support services (PTSS) targeting HIV-positives with positive prevention counseling, which reaches over 12,000 new clients (70% female) each month. Family planning (FP) counseling and referral, with specific emphasis on DP, FP and condom use, was integrated in the counseling process at both services networks. From October 2008—September 2009, 308,855 clients received both FP and DP counseling through HTC and PTSS service providers respectively. To improve contraceptive access and choice, PSI distributed 21,220 injectables and 16,502 5-year implants through private and public sector partners. To increase knowledge about benefits of DP among women and couples, PSI launched research-based national DP mass media and interpersonal communication campaigns.

Lessons learned: We were able to successfully integrate DP and FP counseling and referral into HTC and PTSS, and improve access to a wider contraceptive method mix. DP can have an impact on primary and secondary prevention of HIV in Zimbabwe.

Next steps: Lessons learned from the integration of FP counseling and services with HTC and PTSS can be used in other countries in the region. The DP communications campaigns developed by the program can also be adapted to use in other contexts.

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MOPE0301
Prevalence of use, mis-use and correlates of female condom use among female sex workers who inject drugs

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Background: The female condom remains the only female-controlled method for preventing pregnancy and HIV/STIs. Little is known about its use among female sex workers (FSWs), a population at high risk of HIV/STIs and violence in the context of negotiation of male condoms. We examined the prevalence and correlates of female condom use among female sex workers who inject drugs (FSW-IDUs) in northern Mexico.

Methods: FSW-IDUs 218 years old who reported injecting drugs and recent unprotected sex with clients participated in an ongoing behavioral intervention in Tijuana and Ciudad Juarez, Mexico. At baseline, participants underwent surveys and biological testing for HIV/STIs. Logistic regression was used to identify correlates of ever using female condoms.

Results: To date, among 514 FSW-IDUs, 6.6% reported ever using female condoms, of whom 43.2% used them at least sometimes with regular partners, 45.5% with regular clients and 54.5% with non-regular clients. Six (13.6%) used the same female condom more than once; of whom, 5 did so 23 times in the past month. One FSW-IDU used two female condoms at the same time on four different occasions. Factors independently associated with female condom use were ever having an HIV test (AdjOR: 3.51; 95% CI:1.63-7.57) and having a regular client who was often/always angry when proposing use of condoms (AdjOR: 3.83; 95% CI:1.70-8.62).

Conclusions: Female condom use is low in this population of FSW-IDUs, possibly due to its cost, availability and/or acceptability. Since re-use of condom may be a risk factor for HIV/STIs, it is imperative to identify barriers and promote education about their correct use. Female condom use may be a reflection of FSWs concern regarding potential violence from clients during condom negotiation, suggesting that client-based interventions are needed.

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MOPE0301
Women’s empowerment? Confidential reports of female autonomy towards female-initiated HIV prevention methods in Zimbabwe

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Background: Female-initiated HIV prevention methods have been developed with the goal of providing products that vulnerable women can use discreetly when male partners are unwilling to use condoms. We conducted a study to understand acceptability and safety study of the Duet® cervical barrier with BufferGel among Zimbabwean women, and examined discreet use of the products and related aspects of female autonomy.

Methods: Using a cross-over design, 83 women used the products for 2 weeks continuously and 2 weeks pre-copitally. Women’s self-reported product disclosure and discreet use were examined using mixed-methods, including a qualitative questionnaire and data from 4 focus-groups with 41 women.

Results: Women were average-age 30 and all were married. All disclosed use to their husband or partner; 70% of the women considered it “important” that her main sexual partner liked Duet and agreed to use it. Nevertheless, a majority also reported that if would use Duet in the future even if their partner disliked it (60%), and without telling him, if they believed he wouldn’t notice (52%). Attitudes did not differ whether a woman was using products continuously or pre-coitally (p>0.05). In focus-groups, women emphasized the importance of disclosure to husbands and felt non-disclosure could lead to suspicion, quarrels or violence, if use was discovered. Because Duet use is potentially undetectable, women thought that discreet use was justified for unmarried women or for married women with untrustworthy partners.

Discussion: As reported in other studies of female-initiated methods in the region, women were more comfortable with use of female condoms compared to male condoms. Women’s acceptance and use of Duet was high, at least in the research context, male partners remain key decision-makers in women’s use of female-initiated methods. 

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MOPE0303
Understanding barriers to condom among female sex workers and their clients in Bangladesh

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Background: Male condoms are effective, and a recognized means of preventing STIs including HIV/AIDS, however, consistent condom use rates during commercial sexual encounters in Bangladesh remain low even after years of targeted intervention. Objective of this study was to explore barriers that hinder condom use among FSW and their clients.

Methods: A cross sectional study was conducted among 1395 FSWs and 1560 clients in brothels, hotels and street settings in Dhaka and Chittagong city in Bangladesh. FSWs were recruited randomly from a list enumerated by mapping in selected brothels, hotels and streets setting in Bangladesh, while clients were recruited from the same settings as FSWs during exit from the spot.

Results: Mean age of female clients that a sex worker entertained per week was 25 (0-216); 24 (0-84) in brothels, 15 (0-105) in streets and 36 (0-216) in hotels. In brothels, only 13.5% of the SW reported condom use in all vaginal sex acts, while 21% of the clients reported to use condom at least in one sex act. Majority of clients (56%) reported that their partners did not expect them to use condom, and 26% reported to use condom because of unavailability of condom. FSWs reported barriers to use condoms included clients’ objection (47%), delay in ejaculation (38.7%), unavailability of condoms (23%) and reported trust in partners (22%). Barriers reported to condom use by clients included sexual dissatisfaction (56%), not habituated to use condoms (26%), and problem in getting a condom (20%). Multivariable regression analysis revealed that both for FSWs and clients in brothel and street were less likely to use condom in last sex act compared to hotel setting.

Conclusions: Client’s disliking, difficulty in getting condoms, and trust in partners are major barriers in condom use during commercial sex in Bangladesh. Intervention programme should address these issues to improve condom use among FSWs and their clients.

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MOPE0304
A step-by-step strategic approach to comprehensive condom programming: the case for Zimbabwe

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Background: Female-initiated HIV prevention methods have been developed with the goal of providing products that vulnerable women can use discreetly when male partners are unwilling to use condoms. We conducted an acceptability and safety study of the Duet® cervical barrier with BufferGel among Zimbabwean women, and examined discreet use of the products and related aspects of female autonomy.

Methods: Using a cross-over design, 83 women used the products for 2 weeks continuously and 2 weeks pre-copitally. Women’s self-reported product disclosure and discreet use were examined using mixed-methods, including a qualitative questionnaire and data from 4 focus-groups with 41 women.

Results: Women were average-age 30 and all were married. All disclosed use to their husband or partner; 70% of the women considered it “important” that her main sexual partner liked Duet and agreed to use it. Nevertheless, a majority also reported that if would use Duet in the future even if their partner disliked it (60%), and without telling him, if they believed he wouldn’t notice (52%). Attitudes did not differ whether a woman was using products continuously or pre-coitally (p>0.05). In focus-groups, women emphasized the importance of disclosure to husbands and felt non-disclosure could lead to suspicion, quarrels or violence, if use was discovered. Because Duet use is potentially undetectable, women thought that discreet use was justified for unmarried women or for married women with untrustworthy partners.

Discussion: As reported in other studies of female-initiated methods in the region, women were more comfortable with use of female condoms compared to male condoms. Women’s acceptance and use of Duet was high, at least in the research context, male partners remain key decision-makers in women’s use of female-initiated methods.

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MOPE0305
Traditional practices affecting the rate of growth of HIV/AIDS in the Mano River Basin in West Africa (Liberia, Sierra Leone, Guinea, Ivory Coast)

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Background: Traditional practices have little or no idea on the danger and prevention of HIV/AIDS and it was realized that “83% of those administering these traditional practices in the countries in West Africa which includes: Guinea, Sierra Leone, Ivory Coast and Liberia, and it was realized that “83% of those administering these traditional practices have little or no idea on the danger and prevention of HIV/AIDS and 66% are willing to adapt safer methods into traditional practices”. 

Lessons learned: This project organizes and trains traditionalist and stakeholders for possible inclusion into the campaign against the spread of HIV/AIDS. We conducted a 6 months survey on traditional practices in the Mano River Basin countries in West Africa which included: Guinea, Sierra Leone, Ivory Coast and Liberia, and it was realized that “83% of those administering these traditional practices have little or no idea on the danger and prevention of HIV/AIDS and 66% are willing to adapt safer methods into traditional practices”.

Next steps: This project establishes safety measures and guidelines for traditionalist to promote and apply HIV/AIDS awareness messages in their respective towns and villages. It introduces safety measures into traditional practices, distinguishes between the necessity of tradition and the importance of life by preventing HIV/AIDS, organized periodic training to reinforce the awareness.

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MOPE0306
Emergency contraception use in South Africa: implications for HIV transmissions

P. Mahara1,2

Background: Emergency contraception (EC) is used to prevent and/or reduce the risk of an unplanned pregnancy. In South Africa EC is available over the counter without a prescription. Understanding the factors that influence use of emergency contraception could assist interventions aimed at encouraging protective behaviour to prevent both unwanted pregnancy and HIV/AIDS.

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The aim of this study is to provide insights into factors facilitating and inhibiting use of EC in the context of a high prevalence of HIV/AIDS.

Methods: This study draws on interviews with providers at public and private health facilities in KwaZulu-Natal, South Africa. Providers constitute an important link to increasing access to EC use.

Results: Use of emergency contraception is low in South Africa. However, the results of the study suggest that the demand for EC is higher in private than public facilities. However, the cost of EC products in pharmacies is likely to be a major barrier to use. In addition, almost one third of providers are reluctant to provide EC over the counter because they feel that the use of EC is likely to discourage regular use of contraception and increase the risk of unprotected sexual intercourse and as a result, contribute to the spread of HIV/AIDS in South Africa.

Conclusion: Health providers have an important role to play in counseling clients about the risk of unprotected sexual intercourse and also, promote EC together with other modes for minimizing the risk of HIV infection.

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Next steps: Replicating the Egyptian integrated model with an adapted harm reduction approach may offer an attractive and practical solution to reaching MARPs in other contexts. Innovative means of encouraging female participation should be identified.

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MOPEO307

Syringe exchange programs around the world: the global context

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Issues: As intravenous drug use has become more widespread throughout the globe in the last three decades, so too has needle sharing become a significant factor in fuelling the HIV/AIDS epidemic. Thankfully, syringe exchange programs in at least 77 countries are highly effective in reducing HIV infections among intravenous drug users (IDUs).

Discussion: Presenter will review findings of a 2009 Gay Men’s Health Crisis report on the global context of SEPs. This will include: regional variations in rates of intravenous drug use and HIV infection; regional SEP development and funding, both national and international; challenges faced; and policy recommendations/best practices based on the most effective approaches from SEPs worldwide. Presenter will also analyze reasons the successful repeal of the ban on use of federal U.S. funds for syringe exchange in December 2008.

Lessons learned: Presenter will highlight five key policy lessons from the review of global SEPs: 1) the importance of government sponsorship and regulatory oversight of community-organized SEPs; 2) how legal regimes can inhibit the success of SEPs in reducing HIV infection rates; 3) ways successful SEPs interact flexibly with drug users, such as by providing mobile services, syringe vending machines, and drug rehabilitation; 4) how countries can use SEPs to promote rehabilitation and reduce drug use; and 5) how SEPs have thrived even in countries with strong social and religious mores opposing drug use.

Next steps: There are significant lessons the U.S. and other countries can learn from the successes of SEPs across the globe to more effectively fight the HIV/AIDS epidemic. Thankfully, syringe exchange programs in at least 77 countries are highly effective in reducing HIV infections among intravenous drug users (IDUs).

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MOPEO308

A unique approach of comprehensive care for most-at-risk populations in conservative societies: the case of Egypt

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Issues: Existing interventions targeting injecting drug-users (IDUs) in Egypt focus mainly on rehabilitation services or awareness campaigns. Reaching active IDUs and other Most-at-Risk Populations (MARPs) has been a challenge for HIV prevention thus far.

Description: FHI, supported by the Drossos Foundation, selected Waay NGO to be the first comprehensive care center providing harm reduction services for active IDUs, linked with street-based outreach by former IDUs. The package of services offered by the center includes: VCT, peer education, basic health, drug testing, harm reduction and home-based care. In 18 months of activity, a total of 903 IDUs were reached on the streets, of which 669 clients were distributed.

Lessons learned: In Egypt, IDUs are less stigmatized than other MARPs, and the positive impact of peers and the relaxed and confidential nature of the program attracted an unprecedented number of IDUs. However, female participation was low (female to male ratio 1:7). Rendering harm reduction applicable in a conservative society where drug use is illegal, it was accepted by distributing, rather than exchanging, new needles/syringes, and condom provision. Reported high-risk behaviors included sharing needles (63%), injecting equipment (88%) and unprotected sex (94%).

Next steps: Replicating the Egyptian integrated model with an adapted harm reduction approach may offer an attractive and practical solution to reaching MARPs in other contexts. Innovative means of encouraging female participation should be identified.

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MOPEO309

HIV, gender and IDUs: what works and the unfinished agenda

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Issues: Injecting drug use has been identified in 148 countries. Approximately 16 million people are IDUs, with the largest numbers in China, USA and Russia. Women represent between 10 to 20% of IDUs. Women may be more likely to borrow or share injection equipment and also be sex workers. However, despite their higher risk of acquiring HIV, female IDUs in every country have more restricted access to services. Women IDUs fear losing their children if they access services.

Description: Peer-reviewed literature from 2001 to 2009 with almost 2,000 citations, compiled in What Works: Evidence for HIV/AIDS Interventions for Women and Girls, produced by OSI and PAL, found evidence that substance abuse treatment, needle exchange, peer education, harm reduction and programming to prevent initiation of injecting drug use can decrease the risk of acquiring HIV by female IDUs. However, interventions are needed that IDUs understand the risks of acquiring HIV through sex as well as through IDU. Interventions are also needed to inform women IDUs of harm reduction early in pregnancy.

Lessons learned: IDUs need harm reduction programs to lower their risk of acquiring HIV. Female IDUs need specific interventions that take into account gender-related issues such as family, peer care and pregnancy.

Next steps: The evidence regarding female IDUs, among other issues, will be widely disseminated to country programs (including governments and civil society) and donor organizations. A web-based version will facilitate access to and use of the evidence in advocating for and designing programs to reach IDUs, meet their needs and improve health outcomes. Countries should address the needs of female IDUs with evidence-based policies.

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MOPEO310

HIV/AIDS/STI prevention targeting IDUs in Lebanon 2008-2009

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Issues: The conservative social norms and legal aspects concerning IDUs in Lebanon strongly reject drug use, deny the existence of drug users and discriminate against them. Taking into account the lack of rehabilitation, detoxification, drop in centers, and OAS as well as considering the cumulative number of PLHIV in Lebanon of which 8% are IDUs, the outreach programs based on harm reduction (HR) using peer to peer approach consists the main linkages between IDUs and the larger community.

Description: In 2008-2009, the outreach activities for STIs/HIV/AIDS/HBV/HCV successes in providing continuous prevention activities and a wide range of innovative and appropriate care services. 2800 IDUs among which 80% are men, 10% MSM and 10% Women were reached in the six Lebanese governorates. The activities of the outreach program are based on HR, the Peer to Peer approach and respect ethical guidelines. The services and materials delivered with confidentiality and in full partnership of NAP, MOI and MOH and coordinated with Health Care Centers operating on all governorates. 2000 IDUs reached through raising awareness and 800 IDUs benefit from VCT for HIV/HBV/HCV. A training module for outreach workers used to train 80 PE. A referral system of 52 health care centers using a protocol to refer and follow the clients was established. 55000 condoms, 1179 syringes and 4600 lubricants were distributed.

Lessons learned: Due to the work conducted by peers and the confidential mobile unit services delivered, IDUs have initiated contact with the existing services, have spread the word concerning the mobile unit services, referring to it more peers from their community.

Next steps: This program succeed in creating confidence between IDUs, peers, civil society and key leaders in Lebanon and to have comprehensive impact it urged the creation of a national strategy to prevent HIV among IDUs in Lebanon.

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MOPEO311

Harm reduction strategies in the Indian Ocean Region - the Mauritian experience

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Issues: - HIV prevalence in the islands of the Indian Ocean (Comoros, Reunion (France), Madagascar, Mauritius and Seychelles) is relatively low (< 1%). But it is fairly high (> 5%) among key populations, including IDU, in Mauritius.

- Injecting Drug Use (IDU) is becoming an increasingly important mode of HIV transmission globally in Mauritius and available information contradicts the prevailing view that IDU is extremely rare or non existent in most African countries.

- The UNODC World Drug Report 2007 reveal that Mauritius has highest an-
nal prevalence of opiate abuse as percentage of the population aged 15-64 in Eastern African region and the second highest worldwide. In 2005, 921 new HIV infections were documented, among which over 95% were in male group. This corresponds to the highest annual incidence for the past 16 years. In the year 2000, only 21% of the new infected cases were among IDUs and it became 85,9% in 2006.

Description:
The Ugandan government implements a comprehensive set of measures for HIV prevention among those key population.


April 2005: Implementation of Needle Exchange Program (by the National AIDS Committee).

November 2007: NGO component was launched, fixed sites (funded by gov- ernment) launched.

May 2008: Mobile component was launched (31 sites all across the island).

Lessons learned:
- To date, 2000 Heroin Users have been induced on Methadone Maintenance Therapy out of whom 323 are females. 15 are pregnant. Methadone dispensing is being done at 15 dispensing points throughout the island. The retention rate in treatment is 91%.
- The Mobile caravans reach an average of 5,000 IDUs and the fixed sites serve 600 to 700 IDUs.

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MOPE0312 Trends in availability of syringes to injecting drug users (IDU) and coverage at national level in Switzerland 1996-2006

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Background: In Switzerland, where injecting is mainly encountered in heroin users, injecting equipment is widely available through syringe exchange programmes, pharmacies and medically prescribed heroin treatment pro- grammes. Syringe distribution and sales to IDU at national level are routinely monitored since 1993. In this study, we provide estimates of equipment avail- ability and coverage for the years 1996 and 2006.

Methods: Based on official estimates of heroin users in Switzerland (1997 and 2006), using different methods we estimated the number of injectors: A) subtracting drug users in methadone treatment (1996-2006); B) apply- ing percentages of injectors in surveys (1996-1998 and 2006) among attenders of low threshold facilities including needle exchange programmes. National sales of syringes were used for the number of syringes distributed or sold to IDU. Availability was defined as the monthly number of syringes available per IDU. Coverage was defined as the mean number of syringes available per 100 IDU divided by the monthly median number of inject- ors made per IDU.

Results: The number of syringes distributed decreased from 457'453 per month in 1996 to 385'190 in 2006 ; the estimated number of injectors de- creased by 40% according to both estimation methods. However, the monthly availability of syringes per IDU increased: from 31 syringes to 44 according to method A, and from 18 to 26 according to method B. Coverage was estimated as 33%/54% in 1996, and 83%/137% in 2006.

Conclusions: Both methods produced similar estimates regarding changes in the number of injectors, according to availability and coverage of syringe distribution (increasing). Both estimates tend to show that coverage reaches satisfactory levels in 2006.

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MOPE0313 Reducing HIV transmission and reducing drug use in post conflict areas: a successful cross-border harm reduction services to injecting drug users along the China-Myanmar border

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Issues: Drug use is a wide spread problem in the communities along the China-Myanmar border as most of these areas are part of the drug production fields. The ceasefire group controlling the areas on the Myanmar side use to kill drug users, trying to solve the problem. HIV prevalence among the inject- ing drug users (IDU) along the China-Myanmar border is 69%.

Description: Comprehensive harm reduction services to these drug users on both sides of the border show positive result. 870 drug users (80% male, 20% female, 86% from Myanmar, 14% from China) are now registered in the programme, more than 500 needles were exchanged per day. 3 years of consecutive survey among the IDUs show HIV prevalence reduced slightly (69% to 67.3%) over 3 years, while prevalence of Hepatitis C decreased dra- matically (62.6% to 31.7%). The percentage of people sharing needles over the last 6 month decreased from 40.4% to 20%. The programme also start low threshold voluntary drug rehabilitation forms that are managed by former drug users. 112 drug users detoxed and retrained into their community with low prevalence of drug use. The farm is now run by 6 former drug users and can provide jobs to drug users. Cross border cooperation committees organized with the participation of local authorities from both sides of the border to discuss joint efforts on harm reduction and HIV prevention services provision. Supportive environment for harm reduction across the border areas are created both at the community level as well as the community level.

Lessons learned: It is possible to run cross border harm reduction pro- grammes targeting sensitive population.

Next steps: Scale up the programme to the whole Myanmar-China border and replicate in Afghanistan-China or Afghanistan-Iran Border.

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MOPE0314 HIV risk practices decline with buprenorphine substitution therapy among IDUs in Delhi, India

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Background: While Oral substitution therapy (OST) has proven effective in reducing HIV transmission risk among the industrial world, very little data have emerged from Asia. Considering that OST is being launched and scaled up in many countries in Asia, it is important to be evaluated in order to establish protocols for effective implementation.

Methods: A longitudinal study among 449 IDUs was conducted in Delhi for a period of 15 months. During this time, buprenorphine substitution was pro- vided along with other interventions such as nutrition, education, HIV coun- seling and testing, and needle and syringe exchange. The findings indicate that a longer period of retention on BST and a higher dose level (currently, low doses of oral buprenorphine are distributed in Delhi, aver- aging 2 mg) are associated with HIV risk reduction in terms of injecting and sexual behaviors.

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MOPE0315 Injection drug use cessation after use of North America’s first medically supervised safer injecting facility

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Background: In September 2003, Vancouver, Canada opened a plot medi- cally supervised safer injecting facility (SIF), where people who inject drugs (IDU) can inject pre-obtained illicit drugs under the supervision of medical staff. There has been substantial local and international opposition to SIF because of the perception that these facilities enable drug use and reduce the likelihood that IDU will seek to reduce drug availability and coverage of syringe distribution (increasing). Both estimates tend to show that coverage reaches satisfactory levels in 2006.

Methods: We used Cox regression to examine factors associated with the time to the cessation of injecting, for a minimum of six months, among partic- ipants enrolled in the Scientific Evaluation of Supervised Injecting (SES) cohort, a random sample of individuals recruited from within the Vancouver SIF. In sub-analyses, we evaluated the time to enrolment in any form of ad- diction treatment.

Results: Between December 2003 and June 2006, 1090 SESI participants were recruited. In Cox regression, factors independently associated with drug use cessation included methadone maintenance therapy (Adjusted Hazard Ratio [AHR] =1.59 [95% Confidence Interval [CI]: 1.04 - 2.44]) and use of other addiction treatment (AHR =1.89 [95%CI: 1.08 - 3.29]). In sub-analyses, regular SIF use at baseline (AHR =1.32 [95%CI: 1.03 - 1.70]), having contact with the addiction counselor within the SIF (AHR =1.61 [95%CI: 1.19 - 2.18]), and Aboriginal ancestry (AHR =0.65 [95% CI: 0.46 - 0.90]) were independently associated with initiation of addiction treatment.

Conclusions: While the role of addiction treatment in promoting injection cessation has been well described, these data indicate a potential role of SIF in promoting increased uptake of addiction treatment and subsequent injec- tion cessation. The finding that Aboriginal participants were less likely to enrol in addiction treatment is consistent with prior reports and demonstrates the need for novel and culturally appropriate drug treatment approaches for this population.

MOPE0316 Non-fatal drug overdose among Vietnamese heroin injectors: magnitude, causes, and implications for prevention

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Background: Overdose of drugs is a leading cause of death among injection drug users (IDUs) worldwide, but little is known about drug overdose among Vietnamese IDUs. This study examines the prevalence, incidence, causes, and predictors of non-fatal drug overdose among a cohort of community-dwelling heroin injectors in Thai Nguyen Province, Vietnam.

Methods: We analyzed data from a cohort of 894 male drug injectors (median age of 32 years, median length of drug injection of 5.3 years, 23% HIV seropositive

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125

Abstract Book Volume 1 | www.aids2010.org

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Monday 19 July
Poster Exhibition

Tuesday 20 July
Author Index

Index
HIV risk behaviour in consumers of harm reduction services for people who inject drugs in Indonesia

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**Issues:** Results from a range of behavioural surveys regarding HIV risk behaviour and HIV prevalence of people who inject drugs (IDUs) suggest high reduction (HR) measures in Indonesia are having an impact. Disease amongst IDUs who inject drugs is 54% nationally (43%-56%) estimated in an population of 219,000 (2006). The HIV HR program for IDUs operates in 15 of 33 provinces and includes 169 needle syringe and 49 methadone programs, 9 in prisons. Work began in 2000 with a small pilot needle syringe program. Formal recognition followed in 2001 as senior Ministry of Health staff authorised commencement of a needle syringe program. National and local government regulations and guidelines provide a firm policy and regulatory environment. Services are delivered through fixed site and outreach services, community health centres and pharmacies in partnership with NGOs and peers.

**Lessons learned:** Results from behavioural surveys regarding HIV risk behaviours of IDUs accessing services suggest impact from HR measures. HIV prevalence amongst IDUs injecting for two years or less is lower than the national rate, at 10%-41%. Results in 2009 indicate that 67% of those receiving services in 3 provinces reported not sharing in the last week and 73% used a clean needle after injection. There was no observable difference in rates of sharing between men and women. Recipients of programs in cities that have conducted services longer have better results, particularly Bali. Amongst service recipients in 3 provinces condom use at last sex with regular partners was 39%, 61% with casual partners, 69% with sex worker and 49% when selling sex. When selling sex, condom use was highest amongst women IDUs (64%/49%). Client satisfaction surveys demonstrate high level of overall satisfaction with services in hospitals, health centres and NGOs.

**Next steps:** Indonesia continues to scale up HR services. 

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Recovering addicts and outreach workers deliver harm reduction services linked to HIV prevention, care and treatment in Zanzibar

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**Issues:** HIV prevalence is <1% in the general population of Zanzibar, but much higher (16%) among injecting drug users (IDUs). Many IDUs have regular sexual partners, creating a potential bridge to the general population. The International Center for AIDS Care and Treatment Programs (ICAP) has supported scale-up of HIV prevention, care and treatment in Zanzibar since 2004. In 2008, ICAP initiated a community-based harm reduction program with Government of Zanzibar support and three local NGOs.

**Description:** The United for Research on HIV/AIDS Prevention program aims to improve HIV prevention among IDUs and most at risk populations (MARPS), enhance linkages between HIV prevention, care and treatment services, and build capacity of Zanzibari IDUs, health workers and active recovering addicts, deliver information on behavioral risk reduction and safer injecting practices. They distribute condoms and bleach kits for cleaning needles, and facilitate use of mobile HIV testing. They also refer to drug rehabilitation services and HIV care and treatment.

**Lessons learned:** In 2007/2008, updated information has been gathered on the availability of harm reduction services, barriers to accessing and scaling up areas for harm reduction, including HIV and harm reduction in prisons and the situation and response to tuberculosis and viral hepatitis among people who inject drugs.

**Next steps:** The availability of information on harm reduction programming and policy worldwide must be improved, to inform both advocacy and action. At a national, regional and international level, advocates must utilise this data in their efforts to convince donors and policy makers of the necessity to scale up harm reduction.

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Access to HIV prevention commodities in pharmacies

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**Background:** Previous studies (2006; 2007) conducted by UNICEF Romania, Romanian Harm Reduction Network members regarding pharmacists perception on IDUs, showed that procurement of HIV prevention supplies (syringes, etc) is difficult. Studies showed that pharmacists perceived the selling of syringes as an encouragement of drug use and not as a health prevention activity.

**Objectives:** UNICEF Romania and RHRN members mobilized to re-oriented syringes sale policies and pharmacists perceptions to a new public health on the basic idea that harm reduction (NEP and OST) in pharmacies represents a new approach to promote HIV/AIDS public health and legal and social inclusion of IDUs.

**Novelty:** The novelty of the current research: access to HIV prevention commodities (syringes and ampoules) and substitution programs (NEP and OST) in pharmacies. Continuous participation and feedback from IDUs in research development process.

The purpose of this program is to identify new ways to improve access of vulnerable groups, M&A - IDUs and SWs to HIV prevention commodities in these settings.

**Methods:** 750 pharmacies co-opted in the process: online questionnaires for managers and 500 pharmacies visited by field operators (social assistance students and IDUs, boys and girls, aged 18 - 24 years old syringes/ampoules/OST in pharmacies). Core indicators and study protocols were developed in partnership with Pharmacies College, civil society and international partners, UN and technical partners and vulnerable group representatives.

**Results:** Increased responsibilities from pharmaceutical chains and a good partnership with Pharmacies College; Training curricula on IDUs included in the curriculum of Pharmacies University; Increased participation of IDUs in programmes that are targeting their population; IS students from Social Assistance University and IDUs support group active during development process; Program implementation on IDUs, showed that procurement of HIV prevention supplies (syringes, etc) is difficult.

**Conclusions:** Lobby and advocacy for pharmaceutically chairs to participate in HIV prevention programs (access to NEP and OST) and thus contributing to HIV/AIDS prevention activities. Periodical evaluation on access to needle exchange/OST in pharmacies.

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The state of the global harm reduction response in 2010

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**Issues:** Despite the disproportionate impact of HIV/AIDS on people who inject drugs, harm reduction remains lacking from most national AIDS plans and policies and inaccessible to the vast majority of people who need it. A global picture of the response is critical to advocacy and action in scaling up towards universal access for people who inject drugs.

**Description:** In 2007/2008, the International Harm Reduction Association worked with regional and national harm reduction networks, drug user organisations and researchers to compile country-by-country information on the harm reduction response in policy and practice worldwide. In 2009/2010, updated information has been gathered on the availability of key harm reduction services, barriers to accessing and scaling up areas for harm reduction, including HIV and harm reduction in prisons and the situation and response to tuberculosis and viral hepatitis among people who inject drugs.

**Lessons learned:** While data availability remains poor, there have been some key developments in policy and practice since 2007, including an increase in the number of countries with needle and syringe exchange and opioid substitution programmes in place. However, many countries with injecting drug use have no harm reduction services in place and as yet, no low or middle income country has implemented coverage levels necessary to avert or reverse an HIV epidemic among people who inject drugs.

**Next steps:** The availability of information on harm reduction programming and policy worldwide must be improved, to inform both advocacy and action. At a national, regional and international level, advocates must utilise this data in their efforts to convince donors and policy makers of the necessity to scale up harm reduction.

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MOPE0321
Professional injectors: a cost effective measure to reduce HIV/AIDS transmission and overdose related deaths in Kabul, Afghanistan

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Issues: After almost 40 years of war, Afghanistan continues to face tremendous stabilization, reconstruction and development challenges. Moreover, the country has to cope with a concentrated HIV/AIDS epidemic among Injecting Drug Users. Drug use being prohibited both by law and religion, people who use drugs are highly stigmatized. A big majority of them are unemployed and therefore turn to informal daily work to survive (92% of MDM Drop in Center clients). Among them, some become "professional injectors," meaning they inject other drug users as a profession. MDM decided to take this opportunity to disseminate Harm Reduction knowledge.

Description: We started working with professional injectors, which were identified by our peer educators, in order to reduce HIV/AIDS transmission and overdose related deaths. First of all, in regards to HIV/AIDS, professional injectors are on the frontlines of prevention. They are great Harm Reduction messengers if provided with training on blood borne viruses, safe injection practice, as well as unrestricted access to needle exchange programs. Secondly, overdose related deaths can be significantly reduced through training professional injectors in recognizing overdose signs and overdose management. Through training and the provision of Naloxone, professional injectors will prevent their clients from overdose.

Lessons learned: Involving professional injectors in HR programs is a cost effective way to get preventive messages and tools to the injecting drug user community. The created network of professional injectors provided MDM with an effective way to get preventive messages and tools to the injecting drug user community. The created network of professional injectors provided MDM with an effective way to get preventive messages and tools to the injecting drug user community.

Next steps: Working with professional injectors should be highly recommended for harm reduction implementers working in poor settings where such profession can be found. MDM will capitalize and produce a guideline on the experience.

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MOPE0322
Peer network intervention in Vietnam decreases injection risks for IDUs and their risk partners

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Background: Since the first case of HIV/AIDS was detected in an injection drug user (IDU) in 1990, the HIV epidemic in Vietnam has remained concentrated among IDUs. They currently account for over 50% of all HIV/AIDS cases and the national prevalence of HIV/AIDS among this group is estimated at 3.5% ranging from 3%-5% by province.

Methods: From 2005-2007, we conducted a randomized behavioral trial to assess the efficacy of a peer-oriented network HIV prevention intervention on injecting behaviors measured through a validated risk index of no injecting, sharing needles and syringes. The experimental intervention consisted of four group peer educator counseling sessions, and two booster sessions delivered to the index member only. All participants in both arms received individual HIV counseling and testing. Follow-up visits occurred at 3, 6, 9, and 12 months. We conducted the Wald-based test comparing the drug risk index scores at all follow-ups between the intervention group and the control group.

Results: Of 935 enrolled participants (index = 419, network members = 516), 894 (95.6%) were male and 916 (99.0%) injected heroin. Mean age was 32.0. The intervention had statistically significant effects on the drug behavior scores across visits, with a reduction of 21% standard deviation at the fifth visit (99% CI: 3-38%). The Wald-based test comparing the drug behavior score at all 4 follow-up visits between the intervention and control group yielded a p-value of .007 which suggests relatively strong statistical evidence of intervention effect on drug behavior.

Conclusions: We found that our peer educator intervention was associated with a reduction in injecting behaviors. Small group interventions that channel the power of peer education are an effective means of reducing injecting risks among Vietnamese IDUs.

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MOPE0323
Reduced risk of transmission transfused HIV in Kenya: nucleic acid testing (NAT) does not detect transient HIV infections compared with fourth generation combined p24 antigen and HIV antibody screening

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Background: Following a 1994 study showing a high rate of transfusion-associated HIV transmission in Kenya, implemented WHO blood safety recommendations including: organizing a National Blood Transfusion Service (NBTS) with six regional blood centers; collection of blood from only voluntary, non-remunerated donors passing a stringent selection process including a behavioral screening questionnaire and medical exam; and universal screening with a fourth generation p24 antigen and HIV antibody assay. The study showed a high rate of transient HIV positivity in donors dropped from over 7% to 1.2% during the past decade. This national assessment estimates the risk of transfusion-associated HIV transmission in Kenya resulting from NBTS laboratory error and limitations of detection of HIV under the current screening algorithm and considers the potential safety benefit of instituting pooled nucleic acid testing (NAT) to reduce window period transmission.

Methods: From November-December 2008 in one NBTS center, and from March-June 2009 in all six centers, every third unit of blood screened negative for HIV by the national algorithm was selected. Dried blood spots were prepared and sent to a reference laboratory for further testing, including NAT. Test results from the reference laboratory and NBTS were compared. Risk of transfusion-associated HIV transmission due to laboratory error and the estimated yield of implementing NAT were calculated.

Results: No cases of laboratory error were detected in 12,435 units tested. We estimate that during the study period, the percentage of units reactive for HIV by NAT but non-reactive by the national algorithm was 0.0% (95% exact binomial confidence interval, 0.00% - 0.024%).

Conclusions: By adopting WHO blood safety strategies for resource-limited settings, Kenya has substantially reduced the risk of transfusion-associated HIV infection. Since the national testing and donor selection algorithm is effective, implementing NAT is unlikely to add a significant safety benefit. These findings should encourage other countries in the region to fully adopt the WHO strategies.

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MOPE0324
Prevalence of hepatitis B surface antigen and human immunodeficiency virus antibodies in donors in Nigeria

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Background: Following a 1994 study showing a high rate of transfusion-associated HIV transmission in Kenya, implemented WHO blood safety recommendations including: organizing a National Blood Transfusion Service (NBTS) with six regional blood centers; collection of blood from only voluntary, non-remunerated donors passing a stringent selection process including a behavioral screening questionnaire and medical exam; and universal screening with a fourth generation p24 antigen and HIV antibody assay. The study showed a high rate of transient HIV positivity in donors dropped from over 7% to 1.2% during the past decade. This national assessment estimates the risk of transfusion-associated HIV transmission in Kenya resulting from NBTS laboratory error and limitations of detection of HIV under the current screening algorithm and considers the potential safety benefit of instituting pooled nucleic acid testing (NAT) to reduce window period transmission.

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Blood, organ and tissue safety and nosocomial transmission
MOPE0323-MOPE0327

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the need to mandate all organization involved in blood banking to ensure proper screening of blood units prior to transfusion in order to reduce the risk of any HIV infection.

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MOPE0325 Assessment of the knowledge, attitude and practices of nursing students in Enugu, Nigeria on human immunodeficiency virus and infection control

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Background: The study investigated the knowledge, attitude and practices of Nursing students in Enugu, Nigeria on HIV/AIDS and infection control. The Nursing students are usually involved in the handling of patients in course of their clinical training. This certainly exposes them and the patients to cross infection, especially when they are ill informed on general infection control strategies.

Methods: The study was carried out between September and October 2009 and involved 105 (10 males and 95 females) Nursing students in Enugu, Nigeria between 10-40 years of age. Structured questionnaires were administered to the students.

Results: The result of the study showed that, 98.1%, 93.3% and 91.4% of the nursing students knew that HIV can spread through sex, blood transfusion and contaminated instruments, some still held that the virus can be transmitted via kissing and public toilet. Similarly, while 96% and 86.7% of the students respectively use hand gloves and face masks constantly while attending to patients, 3.8% and 10.5% admitted the re-use of instruments and hand gloves without sterilization.

Conclusion: Whereas the knowledge, attitude and practices of the nursing students towards HIV/AIDS and infection control were relatively encouraging, there is need for further enlightenment and exposure of the students to proper infection control guidelines on HIV/AIDS and infections on measures. The overall result of the present study appears to underscore the achievements of HIV/AIDS education/enlightenment programs over the years, especially in the developing nations.

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MOPE0326 Deferral from donating blood of men who have sex with men: impact on the risk of HIV transmission by transfusion in France

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Background: In France, men who have sex with men (MSM) are permanently excluded from blood donation. This policy is felt to be discriminatory by MSM activists. In addition, this deferral policy is not fully respected since some MSM do not report their sexual orientation before donating.

Methods: First, we estimated the fraction of the current risk of transfusion-transmission of HIV attributed to MSM, since some MSM are regularly found HIV-positive when donating blood despite the deferral policy. We then constructed a model based on data obtained from behavioural and epidemiological surveys among MSM to assess the impact of a new strategy in which MSM are gaged in non-vaginal sex in their last sexual experience and majority had their sexual debut between the ages of 15-24 years. Of the donor, 5.2% were HIV-positive, 9.9% were Hepatitis B positive, and 4% were Hep C positive. No one had HIV, Hep C and B co-infected with HIV. Similarly, 10.1% had HIV and Hep C. Several risk factors were reported among the donors among which included the use of psychoactive drugs (25.1%), STI and sex with a sex worker all in the last 12 months. Only 18.9% had good Knowledge scores for HIV (75% correct). Predictors of any infection seen in 113 (13.1%) donors included being unmarried [OR=2.45 (CI 1.2-4.9, p=0.01), being uncircumcised [OR=3.09 (CI=1.2-8.0), p=0.02]. Donors who were not paid to donate blood had a lower risk [OR=0.2 (CI=0.5-0.8) p=0.026]. Hep B positive were less likely to be HIV-positive (p=0.034). Hep C were less likely to be HIV-positive and HIV-positive were less likely to have Hep B or Hep C (p=0.05, P< 0.05).

Conclusions: Commercial blood donors should be discouraged and deferral system identified and put in place.

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MOPE0327 Blood safety, HIV/AIDS, hepatitis B and C co-infection among blood donors in Ibadan, Nigeria

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Background: Since National blood policy was launched in Nigeria in 2006, blood safety is still threatened as donations are largely opportunistic non-voluntary and generally viewed negatively. This study assessed HIV co-infection (Hepatitis B&C) among donors

Methods: Participants were enrolled at the UCH blood bank over a period of 3 months. Using an interviewer-administered, semi-structured questionnaire, socio-demographic, behavioral, HIV-KAP data were collected on consenting donors.

Results: Mean age was 32 ± 9 years (range 18-63), only 18(2.1%) were over the age of 55 years. Of the donors 59(58.6%) were married, 50(77.7%) were Christians, 635(73%) had at least secondary level education; 782(90.1%) were male, 90.6% were sexually experienced, 2.1% engaged in non-vaginal sex in their last sexual experience and majority had their sexual debut between the ages of 15-24 years. Of the donor, 5.2% were HIV-positive, 9.9% were Hepatitis B positive, and 4% were Hep C positive. No one had HIV, Hep B & Hep C, one (0.1%) was co-infected with HIV and Hep B, similarly 1(0.1%) had HIV and Hep C. Several risk factors were reported among the donors among which included the use of psychoactive drugs (25.1%), STI and sex with a sex worker all in the last 12 months. Only 18.9% had good Knowledge scores for HIV (75% correct). Predictors of any infection seen in 113 (13.1%) donors included being unmarried [OR=2.45 (CI 1.2-4.9, p=0.01), being uncircumcised [OR=3.09 (CI=1.2-8.0), p=0.02]. Donors who were not paid to donate blood had a lower risk [OR=0.2 (CI=0.5-0.8) p=0.026]. Hep B positive were less likely to be HIV-positive (p=0.034). Hep C were less likely to be HIV-positive and HIV-positive were less likely to have Hep B or Hep C (p=0.05, P< 0.05).

Conclusions: Commercial blood donors should be discouraged and deferral system identified and put in place.

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MOPE0328 Male circumcision

MOPE0328-MOPE0360

MOPE0328 The protective effect of male circumcision from HIV infection and sexually transmitted diseases: evidence from 18 demographic and health surveys in Sub-Saharan Africa

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Background: The protective effect of male circumcision from HIV infection and Sexual Transmitted Diseases (STDs) is controversial as various studies report conflicting findings. The study is aimed to assess the protective effect of male circumcision from HIV infection and STDs.

Methods: This is a cross sectional comparative study based on secondary data of 18 Demographic Health Surveys (DHS) conducted in Sub-Saharan Africa starting from 2003. From all surveys, information on 70,554 males aged 15-59 years was extracted and association between male circumcision and HIV infection and STD symptoms (Genital discharge or genital ulcer/sore) was assessed using binary logistic regression. Adjustment was made for sexual history and basic socio-demographic variables.

Results: The weighted prevalence of HIV among men 15-59 years was 3.1%. In the bivariate analysis being uncircumcised was significantly associated with risk of HIV with Odds Ratio (OR) of 4.12 (95% CI: 3.85-4.42). The association was even more significant, 4.95 (95% CI: 4.57-5.36), after adjustment for number of sexual and socio-demographic variables. The risk associated with un-circumcision is significantly lower among younger men aged 15-29 years than those in 30-59 years age category. About 5.5% of the study subjects reported either genital discharge or genital ulcer/sore in the preceding 12 months of the survey. Circumcision was not significantly associated with either of the symptoms of STD with adjusted OR of 1.07 (95% CI: 0.99-1.15).

Conclusions: Male circumcision provides a strong protection against acquisition of HIV infection. Hence, it can be considered as an important way of reducing the spread of HIV infection in areas where the practice is rare. Comprehensive study to assess the association between circumcision and different types STDs is recommended.

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MOPE0329
Use of a mixture of lignocaine and Bupivacaine versus lignocaine alone for male circumcision under local anesthesia in Rakai, Uganda

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Conclusion: Consistently, the lignocaine group had significantly lower pain scores compared to the mixture group. Therefore, a higher proportion of men in the lignocaine group were more likely to report pain during the immediate postoperative period (aRR 11.6, 95%CI 3.5, 37.9), p < 0.001, following lignocaine alone. This proves that lignocaine alone is a better alternative to the mixture. Pain scores were compared between the two anesthetic groups. A higher proportion of men reported pain during surgery in the lignocaine group (aRR 11.6, 95%CI 3.5, 37.9), p < 0.001, required additional anesthetics during surgery that were assessed using Poisson adjusted rate ratios (aRR).

Results: Patients’ age, weight, provider and surgical method were comparable between the two anesthetic groups. A higher proportion of men reported pain during surgery in the lignocaine group (aRR 11.6, 95%CI 3.5, 37.9), p < 0.001, required additional anesthetics during surgery that were assessed using Poisson adjusted rate ratios (aRR).

Background: Ensuring pain-free male circumcision (MC) is essential to ensure the acceptability of this HIV prevention intervention. In Rakai, Uganda, we compared self-reported pain control during surgery and post-operatively between men receiving a mixture of lignocaine and Bupivacaine compared to lignocaine alone.

Method: 360 men who sought MC as a service were randomly assigned to receive lignocaine alone (179 men) compared to lignocaine and Bupivacaine (181 men). Characteristics including patients’ age, weight, surgeon’s qualifications (physician versus clinical officer), surgical method and duration of surgery were compared between the arms using two sample t test, and Chi square or Fisher’s exact test. The proportions of men in each group who reported experiencing pain during or after surgery, and/or needed additional anesthesia during surgery were assessed using Poisson adjusted rate ratios (aRR).

MOPE0330
Using a foreskin holder and surgical pen mark for improved tissue alignment prior to early infant male circumcision

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Background: In a comprehensive review of the complications of circumcision Kaplan noted that errors made in removing insufficient or excess amounts of foreskin during infant male circumcision could be prevented by marking the site of the corona on the skin surface prior to making an incision.

Methods: We have developed a foreskin holder that can be used in conjunction with a surgical pen mark to help providers align the foreskin during male circumcision. The foreskin holder is simple, disposable, and easy to use. The SR has not been used outside China. The objective of this pilot was to assess safety, efficacy, and acceptability of the SR among Kenyan men.

Results: 181 men (90% of participants were very satisfied with their circumcision and 97.4% said they would recommend the SR to others. Erections with the SR in place were well tolerated, with a mean pain score of 0.8 (0=no pain, 10=worst possible pain). Men were interviewed at enrollment and on days 7 and 42.

Conclusions: Preliminary results suggest the SR is safe for further study in Africa. Acceptance of the SR among study participants was excellent. The SR could facilitate rapid roll-out of MC through task shifting and achieving higher volume efficiencies in MC services. Presenting author email: mbarone@engenderhealth.org

MOPE0331
Pilot study of the shang ring: a novel male circumcision device for HIV prevention

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Background: Scale-up of adult male circumcision (MC) for HIV prevention is limited by the relative difficulty of the surgery. The Shang Ring (SR), a novel device from China, is simple, disposible, and easy to use. The SR has not been used outside China. The objective of this pilot was to assess safety, efficacy, and acceptability of the SR among Kenyan men.

Methods: Forty HIV-negative men were recruited at the Homa Bay District Hospital. SR circumcisions were done by a trained physician or nurse. Follow-up clinical exams were performed at 2, 7, 9, 14, 21, 28, 35 and 42 days after MC, with SR removal on day 7. Pain was assessed using a visual analog scale (0=no pain, 10=worst possible pain). Men were interviewed at enrollment and on days 7 and 42.

Results: All 40 procedures were completed successfully. Mean procedure and removal times were 4.9±2.0 and 4.0±2.7 minutes, respectively. There were no severe or moderate adverse events (AEs). The 6 mild AEs included 3 cutaneous injuries (mild damage to the penile skin while wearing the ring), 2 cases of moderate edema, and 1 infection; all AEs resolved with conservative management. There were 3 device hazards, all partial detachments of the SR between 2 and 7 days. None required treatment or early SR removal. Erections with the SR in place were well tolerated, with a mean pain score of 3.6±2.2. Approximately 85% of men were back to work by day 7. At 90% of participants were very satisfied with their circumcision and 97.4% said they would recommend the SR to others.

Conclusions: Preliminary results suggest the SR is safe for further study in Africa. Acceptance of the SR among study participants was excellent. The SR could facilitate rapid roll-out of MC through task shifting and achieving higher volume efficiencies in MC services. Presenting author email: mbarone@engenderhealth.org

MOPE0332
Factors associated with the circumcision decision: baseline results from the risk compensation study in Nyanza province, Kenya

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Background/Methods: To evaluate potential risk compensation following male circumcision among 18-35 year old men in Western Kenya, we are conducting a longitudinal study of men who seek circumcision services and in a comparison group choosing to remain uncircumcised. Here we examine the factors associated with the circumcision decision-making process.

Results: There were no differences in most behavioral characteristics, reproductive health history, sexual function, or history of HIV testing between 1632 participants who chose circumcision versus the 1179 who chose not to circumcise (controls). Adjusted for age, men in the circumcision group were more likely to report pre-circumcision history of genital sores, cuts, scratches and abrasions (OR=1.4, 95%CI 1.1-1.8), to experience penile bleeding during or after sex (OR=1.7, 95%CI 1.2-2.4), and to be dissatisfied with various aspects of sexual intercourse, including: their level of sexual desire (OR=0.8, 95%CI 0.6-0.9), ease of insertion of the penis into partner’s vagina (OR=0.7, 95%CI 0.6-0.9), interval between erections (OR=0.7, 95%CI 0.6-0.9), and ease of ejaculation (OR=0.7, 95%CI 0.6-0.9). This group perceived them- selves to be at higher risk than controls (OR=1.3, 95%CI 1.1-1.5) and believed that safe sexual behavior required a lot of effort (OR=1.4, 95%CI 1.1-1.8). Men who chose to be circumcised had a more favorable outlook on all items related to beliefs about circumcision (p< 0.001), from hygiene to sexual pleasure. They were more likely to agree that because circumcision is now available, HIV is a less serious threat (OR=2.1, 95%CI 1.7-2.5) and they are less
MOPE0333
Efficiency and equity in HIV prevention: a case study of a male circumcision intervention in South Africa

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Background: Recently, three randomized controlled trials in sub-Saharan Africa consistently demonstrated the substantial protective effect of male circumcision (MC) upon female to male HIV transmission. Demand of MC is very high: a recent review showed the median proportion of uncircumcised men willing to be circumcised in sub-Saharan Africa to be 65%. Therefore, policy makers are now confronted with the question of equitable access to MC surgery in their country. We used an MC intervention in South Africa to illustrate this efficiency/equity framework embedded in any public policy decision-making.

Methods: We looked at a 1-year MC intervention for HIV prevention in South Africa targeting young men aged 18-30 years and covering 8 South African provinces excluding the Eastern Cape differing with high MC rates. We used a mathematical epidemiologic model using data from South Africa to evaluate the number of infections averted by the intervention for three scenarios:

1. An efficient scenario maximizing the number of infections averted but led to all MC surgeries to KwaZulu-Natal only. Comparatively, the equitable intervention resulted in a significant reduction of infections averted but led to MC surgeries in all provinces; a half efficient/half equitable intervention resulted in a small reduction of infections averted and led to allocating resources in all but two provinces.

Conclusions: Incorporating equity criteria into the allocation of MC surgeries did not alter significantly the efficiency of the MC intervention. Equity criteria should be integral to the epidemiologic/cost-effective assessments of HIV prevention interventions. We demonstrated an efficiency/equity framework that can be adapted to other public health interventions and geographic locations.

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MOPE0334
Traditional initiation and medical male circumcision collaborating: going to the medical mountain?

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ISSUES:
Each year in South Africa, numerous cases of deaths and penile injuries are reported among young initiates undergoing traditional circumcision. The objective of this study was to test whether collaboration with traditional circumcisers could be achieved in order to reduce the mortality and morbidity associated with traditional circumcision to the levels obtained in medical circumcision settings.

DESCRIPTION:
We conducted discussions with the leaders of the traditional schools of the Orange Farm area, located in the Gauteng province of South Africa. It was agreed that young initiates would be circumcised by trained medical doctors at the circumcision clinic of Orange Farm before following traditional initiation. Post surgical follow-up visits were conducted at the initiation schools by qualified nurses working at the circumcision clinic. The leaders of the traditional school were satisfied with this collaboration because a) the circumcision surgeries were performed according to their requirements: nurses and doctors were only male, b) the clinic was reserved for only initiates at the time of MC, and c) they did not have to take responsibility for any adverse events associated with the circumcision procedure. So far 25 circumcisions have been performed through this process.

LESSON LEARNED:
Initiation and modern circumcision can be combined into a single process. As a result, the mortality and morbidity rates associated with circumcision among young traditional initiates can be the same as the ones observed in modern medical circumcision settings.

NEXT STEP:
To scale-up this experience in other South African settings, and to explore the feasibility of such collaborations in other ethnic groups and other African countries where traditional circumcision is practiced.

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MOPE0335
Stemming heterosexually acquired HIV infection among men in Uganda: spousal consent, religious and cost factors are key to successful implementation of male medical circumcision in the prevention of HIV/AIDS transmission

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BACKGROUND:
Clinical trials in Uganda, Kenya and South Africa showed that HIV transmission among men can be reduced by up to 60% (WHO/UNAIDS, 2007) through male medical circumcision (MMC). Consequently, consultations and consensus building on possible implementation of MMC started in Uganda and Kenya. The Strengthening TB and HIV/AIDS Responses in East Central Uganda (STAR-EC), a USAID supported program implemented by JSI in six districts conducted a baseline survey and among other indicators examined the willingness and perceptions of males to undergo MMC. Results obtained in this study will inform the design and implementation on MMC policies.

METHODS:
Information was collected from six districts among 901 men aged 15-54 years using the Lot Quality Assurance Sampling survey methodology. Additional qualitative data were also collected to explain quantitative results.

RESULTS:
About a third of all males (37%, n=340) were circumcised. Of those circumcised: 88% were circumcised more than 5 years ago or during childhood; 4% and 9% respectively within the last one year and 1-5 years prior to the survey; 77% were circumcised for religious, 9% cultural reasons and 10% for other reasons. Only 18% were circumcised from health facilities, 45% from cultural/religious settings and 38% from other non-medical settings. Of those who weren’t circumcised, two thirds (66%, n=571) reported they would take up the opportunity once free MMC services were offered. Of those against being circumcised: 37% reported that circumcision is against their faith; 44% feared pain; and 20% feared their partners’ perception and the existence of poor quality circumcision services among others.

CONCLUSIONS:
Survey results suggest a high demand for MMC services. This calls for STAR-EC and other partners to develop the capacity to offer free quality circumcision services. Spousal involvement (from women) in extending MMC to their partners is imperative. Additionally, cultural and religious support is also very important in enhancing this intervention.

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MOPE0336
Medical male circumcision for HIV prevention in Kenya: a study of service provision and adverse events

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BACKGROUND:
The Male Circumcision Consortium (MCC) is supporting the Government of Kenya (GoK) to provide medical male circumcision (MMC) in Kenya. Monitoring and evaluation (M&E) is essential to assess service provision and adverse events.

METHODS:
The M&E system, comprised of clinic-based system and a home-based system, was implemented in 16 GoK facilities to monitor clients from pre-procedure through 40-days post-MMC. Males, aged ≥ 12 years, who are circumcised at a study facility, are eligible to enroll.

RESULTS:
3,003 of 3,205 MMC clients enrolled in the study. GoK staff provided 11.8% of the 2,675 MMC procedures; a clinician provided 70.8% of clients returned for a follow-up visit within 8 weeks after post-MMC. The clinic-based adverse event (AE) rate was 2.7%. 1,000 clients were interviewed for the home-based system a mean of 36.1 days post-MMC. An examination revealed 9.5% had too little foreskin removed and 11.0% were not healed. 30.9% initiated sexual activity before abstaining for six weeks. 152 clients (14.3%) reported an AE. 90 clients (8.6%) were treated for an AE at a health facility. MMCs performed by GoK staff were more likely to result in an AE than procedures provided by MCC staff (OR=3.4, 2.0-5.9). MCCs performed by clinicians reduced the odds of developing an AE compared to MMCs provided by nurses (OR = 0.6, 0.4-0.9). Frequent bathing was protective against AE development (OR=0.2, 0.0-1.0).

CONCLUSIONS:
Further exploration of AE rates and ascertainment (e.g., observation versus client report) is needed. Evaluation of clinical technique is advised to reduce AE incidence and the use of unnecessary aspiration is removed. Counseling should include female partners and recommend frequent bathing. Research has indicated that performing 100 MMCs is necessary for expertise; this analysis may suggest that nurses and GoK staff have not yet reached this level. Methods to increase capacity among these providers should be explored.

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MOPE0337

Retrospective clinical data review from a Ugandan Medical Male Circumcision program (MMC): summary of procedures, safety and level of satisfaction

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Background: Clinical and safety outcomes of an anonymous, retrospective clinical record review were described for 316 clients circumcised in the pilot phase of a MMC program, conducted by the Makerere University Walter Reed Project between February and September 2009.

Methods: The MMC program is unique because it utilizes trained Ministry of Health (MOH) clinicians and requires that recipients pass a test of understanding before services are provided. The pilot program included community sensitization about MMC in three Kayunga districts of Uganda; sub-counties; recruitment of men interested in MMC; obtaining MOH surgical consent; circumcision and follow-up care. Local program staff retrospectively collected outcome data from clinical records. Data were de-identified, cleaned and analyzed with SAS®.

Results: 316 circumcised men from 11 parishes (56 villages) participating in the study were included. The SDT symptoms were applied to 95.2% of the males. They were 22.7 years old (sd 8.5); range 15-70 years. During surgical procedures, none had any aesthetic related events, excessive skin removal damage to the penis or glans, or excessive bleeding or swelling. In most cases, a dorsal slit procedure was used (98.4%). Over 99% felt ready to be discharged at the conclusion of the procedure and were discharged with non-prescription pain medication. At Week 1, none of the subjects had sexual intercourse, difficulty passing urine, signs of swelling or any adverse symptoms. By Week 4, there were no reports of difficulty passing urine, symptoms, pain in the genital area, significant findings or any signs of infection; 100% had complete wound healing and none reported intercourse prior to complete healing. When asked about their medical care satisfaction at Week 4, 82.3% reported that they were very satisfied and 11.7% they were somewhat satisfied.

Conclusions: Implementation of MMC in utilizing local MOH staff can be satisfactory for service recipients.

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MOPE0338

When the troublemakers are involved: the role of traditional circumcision practitioners in promoting healthier circumcision program in Timor Tengah Utara district, Indonesia

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Issues: The People of Atomi Meto in West Timor are still practicing traditional male circumcision. Patients who undergo circumcision are required to have sex with three women, where the first sexual intercourse called ‘sifon’ had to be carried out when the penis is still injured. This tradition increases concerns of HIV and other STDS transmission. There are more than 1000 traditional circumcision practitioners in West Timor. Unfortunately, they are not encouraged to participate in promoting healthier circumcision. Yabim, a local NGO, in collaboration with the National AIDS Commission has been implementing a project in Timor Tengah Utara district to promote healthier circumcision.

Description: As many as 95 traditional circumcision practitioners and 16 health care workers from 11 Community Health Centers in the district have been trained to carry out healthier circumcision program. The trained circumcision practitioners and nurses in the customary oath to stop the traditional ‘sifon’ and implement healthier circumcision. In carrying out the circumcision, the circumcison practitioners should be accompanied by health workers. Community Health Center provides medicines and technical assistance to support the activities of circumcision practitioners and in cooperation with trained circumcision practitioners they promote healthy circumcision program to the community. District AIDS Commission advocates local Parliament and local government to support healthier circumcision.

Lessons learned: By developing a cooperation network among traditional circumcision practitioners and health department is greatly assist the achievement of the project objectives, because the ‘troublemakers’ is now hand-in-hand with us to prevent AIDS through promoting healthier circumcision.

Next steps: We are planning to apply this method to encourage traditional circumcision practitioners in other part of Timor Island to participate in promoting healthier circumcision program.

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MOPE0339

Acceptability of medical male circumcision among men at high HIV risk in Pune, India

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1PRAYAS, Health Group, Pune, India, ‘Public Health Research Institute, V.V. Kulkarni1, S. Kulkarni1, K. Krupp2, S. Darak1, J. Klausner3, among men at high HIV risk in Pune, India

Background: Among a convenience sample of 290 high-risk men recruited from high-risk sites, local transport and loading sites in Pune. Informed consent was obtained from all participants, and trained interviewers administered a structured questionnaire in the local language of Marathi in a private location.

Conventional descriptive statistics were used to assess the characteristics of the study participants.

Results: The majority of participants were Hindus (88.3%); 5.2% were Muslims, and 6.6% other religions. Twenty-three percent of respondents had less than 7 years of schooling, 49.1% had 8-10 years, 20.3% had 11-12 years and 7.6% had more than 12 years of education. All married participants reported having more than one and unmarried reported at least one sex partner in their lifetime. Approximately 44.1% said they had visited a commercial sex worker. Asked about any personal concerns about getting infected with HIV in the next 5 years, 44.9% said very unlikely, 16.4% said somewhat unlikely, and 28.6% said they didn’t know. About 153(52.8%) had heard of MC and 124(81.04%) of these correctly identified the procedure. After being informed about the risks and benefits of male circumcision, a majority (56.9%) said they would consider MC if the procedure were offered in a hospital setting, at low or no cost. When asked if other men should consider MC to reduce their risk of contracting HIV/STDs, 32.8% said ‘strongly yes’, and 60.3% said ‘yes’.

Conclusion: This study found male circumcision to be acceptable to a sample of high-risk men in Pune, India. Further studies of acceptability of MC among other populations are warranted.

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MOPE0340

Reasons men seek male circumcision in Nyangza, Kenya

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Background: Male circumcision (MC) reduces the risk of HIV acquisition by 60%. The Kenyan government is currently rapidly scaling-up MC services. To advise MC scale-up, EngenderHealth, through the Male Circumcision Consortium, is conducting research on MC in Nyangza, Kenya to determine the prevalence and low rate of circumcision. In our research, we asked why men seek MC.

Methods: To address MC scale-up in Kenya, EngenderHealth conducted qualitative and quantitative research. Data presented are from a MC study with over 1100 MC clients, and 3 focus groups among 19 healthcare providers. Both clients and providers were asked about reasons men seek MC.

Results: Ninety-nine percent men who sought MC were Luo, who don’t traditionally practice MC. Healthcare providers thought that men seek MC to reduce risk for HIV and STIs and to improve sexual performance; and that adolescents seek MC due to peer pressure. When asked directly, men (aged 13-54) replied:

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Background: Research demonstrates that male circumcision (MC) reduces the risk of HIV acquisition by 60% in men. WHO recommends MC as part of a comprehensive HIV prevention strategy. The Kenyan government launched a policy framework to support MC rollout and allow nurses to provide MCs. EngenderHealth evaluated the potential of trained health workers to provide safe and effective MC through static (regular clinic-based services) and outreach (health workers travel to offer MCs in other facilities) services in Nyangza province in Western Kenya.

Methods: This prospective study was conducted between November 2008 and December 2009. Data were collected through clinical observations of MCs, and assessment of surgical outcomes of forceps-guided method of circumcision and assessment of client satisfaction through interviews at 7 and 60-days post-surgery. Adverse event (AE) rates were compared to rates reported in clinical trials and other documents.

Results: Preliminary results of 1,230 men aged 13-54 years, show excellent outcomes. 7% (0.06%) and 9.0% at 7 and 60-days, respectively retention rates in the study. No complications were observed during surgery. At 7 days, 0.9% and 0.2% experienced mild and moderate infection respectively, 0.3% experienced delayed wound healing and 0.5% reported mild or severe bleeding. At 60 days, combined moderate and severe bleeding was 0.5%, moderate swelling (0.1%) and, and bleeding (0.1%) were reported.
Conclusions: Published rates of AEs are between 2%-4% among adult men. Our preliminary findings showed AE rates at day 60 lower than the published rates. These preliminary results show that MC services can be safely provided in both outreach and static sites as strategies of scaling-up MC services developed through an integrated model of delivering male circumcision services in four rural districts in Nyanza province in Kenya. Achieving this number of circumcisions means finding the correct balance between supply and demand. An integrated model offers one approach for achieving high volume efficiency while strengthening health systems for sustainable scale-up.

Description: Since October 2008 the USAID funded APHIA II-Nyanza Project has reported integrated MC services at 13 health facilities in 4 rural districts of Nyanza. Key principles for optimizing volume efficiency (MOVE) are utilized involving task shifting to nurses, task sharing of particular steps in the MC procedure, and targeted demand generation. MC services are provided by existing Ministry of Health staff as part of an integrated HIV prevention package through both outreach and static sites. To assess the effectiveness of the model we followed 1,230 men (15-49) at 7 and 60 days to determine MC adverse events and AE rates. Interviews were also conducted with facility staff and managers regarding their perceptions of operational challenges and successes.

Lessons learned: From October 2008 to December 2009, 63 providers were trained and 4,000 circumcisions performed. The average number of MCs performed by an integrated MC team (10-15/day) is comparable to a stand-alone team. Adverse event rates at day 60 range from 0.1% - 0.9%. Ninety-four per cent of men report being very satisfied with the services. Key challenges include shortages of trained MC providers to meet MC demand and lack of motivation at the district level for implementing MC versus other chronic health services.

Next steps: Additional research is required to determine the cost savings of an integrated versus a stand-alone model for delivering MC services. If the integrated model is cost-effective it should be promoted with adequate funding to address key resource shortages and capacity building for local ownership of MC services.

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MOPE0343
Cost and impact of expanding male circumcision services in Eastern and Southern Africa

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Background: In 2007, WHO and UNAIDS recommended that medical male circumcision (MMC) should be a priority prevention service in countries with high HIV prevalence rates and low prevalence of circumcision. The USAID Health Policy Initiative collaborated with UNAIDS to develop the Male Circumcision: Decision-Makers’ Program Planning Tool (DMPPT) to evaluate the costs and potential impact of rapidly scaling-up MMC and to assist countries in developing policies to scale up MMC services.

Methods: The mathematical model of the country-specific demography and HIV epidemic dynamics in the DMPPT allows analysts and decision makers to estimate the costs and impact of different policy options regarding the introduction or expansion of MMC services according to age, service delivery modalities, risk population, etc. Using readily available data, the DMPPT was applied to the situations of 14 countries in eastern and southern Africa.

Results: Scoping MMC to reach 80 percent of adult and newborn males in 14 African countries by 2015 was estimated to require performing almost 28 million MMC in the next 5 years, aver more than 4 million new adult-HIV infections cumulatively by 2025 or, on average, 20% of estimated new HIV infections. The US$1 billion cumulative cost for the intensive 5 year campaign period, generate a cumulative discounted cost savings of US$2.2 billion by 2025, require fewer than 10 circumcisions to be performed per HIV infection averted, and reduce the majority of new HIV infections cumulatively by 50% in the majority of countries.

Conclusions: MMC is one of the most compelling cost effective HIV prevention interventions available. A massive and rapid scale-up of voluntary MMC in eastern and southern Africa is warranted based on the likely cost savings and impact on the region’s HIV epidemics.

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MOPE0344
Surgical time and number of procedures conducted during training vary by type of adult MC procedure

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Issues: Male Circumcision (MC) reduces female to male HIV transmission by approximately 60%. Impact models suggest that rapid scale up of adult MC to 80% coverage in the East and Southern Africa region would avert 4 million new HIV infections by 2015, but this will require a critical mass of proficient MC service providers.

Description: WHO, UNAIDS and Jhpiego developed a manual and training package targeted Male Circumcision under Local Anaesthesia, covering three adult MC procedures: foregut-guided (FG), dorsal slit (DS) and sleeve resection (SR). Most surgical steps (cleaning, and draping, local anaesthesia, hemostasis and wound closure) are the same for the three procedures; only the foreskin removal technique varies. Jhpiego has trained clinicians in Ethiopia, Namibia, Rwanda, Swaziland, Tanzania, and Zambia. After lectures, case studies, small group exercises and simulated clinical practice using anatomical models, participants practice surgical and counselling skills with actual clients in a clinical setting. Doctors, clinical officers and nurses are trained, depending on local regulations. Choice of surgical procedure is often made without thorough deliberation by ministry of health or professional associations.

Procedure time, numbers of clients circumcised and adverse events are recorded during each training event.

Lessons learned: There is no difference in adverse events during training among the three procedures. FG is the fastest technique for newly trained providers; SR is the slowest (48 min vs. 54 min, P< 0.05). Participants perform more supervised cases (81) with FG than SR (63). Countries that choose FG can probably develop proficient MC service providers faster than countries promoting DS or SR.

Next steps: Finding will be shared to National MC Task Forces to inform decisions regarding choice of surgical technique. Jhpiego and our partners are promoting efficiency models during MC training by exploring the use of electrocautery, pre-packaged MC kits, task sharing and more efficient layout of surgical areas.

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MOPE0346
The acceptability of male circumcision (MC) as a measure to prevent HIV infection among men with sex with men (MSM) in Thailand

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Background: Clinical trials have shown a protective effect of MC against the acquisition of HIV infection in heterosexual men. Current data do not support a protective effect of MC in MSM. The general prevalence of MC in Thailand is unknown, but it is thought to be low. This study investigated the acceptability of MC as a potential measure to prevent HIV infection among MSM in Thailand.

Methods: Six focus group discussions were conducted between November 2007 and February 2008. Socio-demographic and behavioral data were collected using a short questionnaire. Discussions were tape-recorded and transcribed. Atlas.ti was used in data analysis.

Results: All 41 participants were Thai, MSM and ≥18 years. Focus groups included circumcised and uncircumcised men and women who were predominantly intrusive or receptive in allistic intercourse. Issues discussed in relation to acceptability of MC were concerns about the efficacy of MC for HIV prevention for MSM in general and for receptive MSM in particular; preventive benefits not outweighing post-surgical pain, fears about loss of sexual sensitivity and concerns about a misshapen penis post-circumcision. Participants considered MC more as a minor surgery for people with phimosis, frenulum-breve, as a religious rite, or for personal hygiene. Men were not aware of the existence of different surgical circumcision styles (placement and shape of the circumcision scar line and amount of foreskin left) with different esthetical outcomes. Participants felt there were other and better ways to MC to prevent themselves from HIV infection.

Conclusions: MSM had appropriate concerns about the efficacy of MC to prevent male-to-male HIV transmission and preferred other HIV prevention methods. Participants expressed misconceptions about side-effects and surgical outcomes of MC, and were not aware of different MC styles. Should MC be provided as a measure to protect MSM from HIV infection, additional education about MC will be necessary.

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MOPE0347
Strategic opportunities for male circumcision as an HIV prevention strategy for HIV

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Issues: Research affirms male circumcision reduces HIV-infection risks up to 60%. In Kenya, national priorities for male circumcision targets traditionally non-circumcising communities where disease burden and HIV prevalence rates are highest nationally. In a culturally diverse country like Kenya, where national prevalence of male circumcision is 85%, promoting circumcision as bio-medical prevention creates a strategic opportunity to examine and respond to concerns linked to traditional rites of passage.

Description: HIV-risk associated with circumcision procedures dominates public concern. However, our hypothesis questions the range of immediate and long-term benefits of male circumcision that shape sexual practices. Preliminary assessments were conducted with CBOS implementing OVC programs representing three circumcision tribes: The Meru, Kikuyu and Luhya. A fourth CB0 represents Kenya’s urban heterogeneous tribal context. Baseline surveys were undertaken to document each community’s circumcision practices. Results were compiled identifying opportunities for programmatic response.

Lessons learned: Behavioral risks include cleansing rituals, promoting sexual activity before healing, promoting sexual prowess and casual multiple partners as expected expressions of manhood. Parallel risks affecting female counterparts of initiates results from early sexual debut and casual sex. Concerns of emerging stigma against non-circumcised tribes and OVC without circumcision scar line and amount of foreskin left) with different esthetical outcomes. Participants felt there were other and better ways to MC to prevent themselves from HIV infection.

Conclusions: MSM had appropriate concerns about the efficacy of MC to prevent male-to-male HIV transmission and preferred other HIV prevention methods. Participants expressed misconceptions about side-effects and surgical outcomes of MC, and were not aware of different MC styles. Should MC be provided as a measure to protect MSM from HIV infection, additional education about MC will be necessary.

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MOPE0348
Implementation of male circumcision in Tanzania: an enhanced prevention strategy for HIV

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Issues: After 3 randomized controlled trials provided strong evidence that male circumcision (MC) reduces the risk of heterosexual HIV infection in men, the National AIDS Control Program in Tanzania began to develop MC policy guidelines. ICAP-TZ is implementing a male circumcision demonstration project at Kagera Regional Hospital to document best practices and lessons for wide scale implementation.

Description: In Kagera region (3.4% HIV prevalence), 38% of males are circumcised (TMMIS 2007/8). Prior to service start-up, ICAP conducted meetings with national and hospital management, community leaders, and health workers. Hospital departments, particularly VCT, and secondary school students from schools served by the hospital were sensitized about the new MC services which are available after working hours. Twelve nurses and clinicians were trained in MC using adapted WHO guidelines. MC clients are routinely offered HIV testing and risk reduction counselling, and referrals are made for other medical consultations when indicated. Two follow-up appointments to monitor adverse events are encouraged.

Lessons learned: Over a 4-month period (Oct-Jan 2010) 263 clients were circumcised; 94% (222) were sexually active men aged 15-25. Only one MC client was identified as HIV-infected and was immediately enrolled in HIV care. No immediate or short term adverse events were recorded. The main reason for circumcision was HIV prevention. There was an increase in clients from October to December although Demand for MC was lowest in January, when students are on holiday outside the hospital’s catchment area. This suggests that school sensitization efforts have played an important role in promoting MC.

Next steps: Male circumcision is a safe, feasible and acceptable HIV prevention strategy for adult and adolescent males in communities that do not traditionally circumcise. MC can be well integrated within existing health delivery services.

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MOPE0349
Experience of establishing medical male circumcision services in the Ugandan military population

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Issues: The Uganda Peoples Defence Forces (UPDF) is a highly mobile, combat active force of mainly sexually active young men. They are one of the Most At Risk Populations (MARPS) in Uganda despite the fact that pre-deployment HIV screening is done for all new recruits. Medical Male Circumcision (MMC) which has been scientifically proven to reduce the risk to HIV infection by 40–65%, is a crucial intervention in such a population where main mode of HIV transmission is hetero-sexual. UPDF, with funding from President’s Emergency Fund for AIDS Relief (PEPFAR) is implementing a 5 year MMC program in this population, with a goal to increase access to and utilization of MMC services.

Description: Starting from a no-consensus point, the program conducted advocacy meetings for military commanders, a guided tour of a civilian MMC centre and orientation seminars for health workers.

The program was launched in 4 of the 12 Military ART centers by procuring medical equipment and supplies. Surgical teams of a physician assistant, a counselor and theatre nurse were trained to provide the WHO recommended minimal MMC package, integrated in routine hospital work. Each facility runs a weekly theatre day, performing a maximum 10 circumcisions. Patients are observed post-operatively for 8 hours and followed up after 1 week. After 4 months of implementation, 3 of the 4 equipped centers are offering services and 174 people have been circumcised, while one has not started.

Lessons learned: There is an overwhelming demand for circumcision among the military populations. Effective leadership mobilization is however more challenging for garnering support. Task force above delivers delivery of MMC services rather than stand alone MMC services is the way to go. The model will be scaled-up to cover all military ART centers.

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MOPE0350

Attitudes and intentions around male circumcision in a representative sample of rural Zimbabweans

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Background: Mathematical modelling suggests that 750,000 HIV infections could be averted in Zimbabwe if 80% of men are circumcised within seven years. Zimbabwe is therefore planning rapid scale-up of male circumcision (MC). This study aimed to determine reported prevalence, attitudes and intentions related to MC among Zimbabweans.

Methods: A representative survey of 18-44 year olds was conducted in six districts in two rural provinces. The survey was part of an evaluation of Zim- babwe's National Behaviour Change Programme (NBCP). All 18-24 year olds and one in three 25-44 year olds living in selected enumeration areas were invited to participate. Logistic regression was used to predict knowledge that MC is an HIV prevention method and willingness to undergo MC.

Results: 2,746 adults (64% females) were surveyed (87% of eligibles). 20% of men reported being circumcised. 38% of men and 29% of women knew that MC prevents HIV. Among the uncircumcised, 52% of men and 58% of women said that MC would be acceptable to be for partner to be circumcised. 45% of men and 16% of women had high levels of MC knowledge. Half and 38% of respondents had grade 11 and grade 10 education respectively. Predictors of knowing that MC prevents HIV were male gender (AOR 1.79; 95%CI:1.30-2.36), being non-Shona (AOR 1.26; 95%CI:1.17-2.21), already circumcised (AOR 1.44; 95%CI:1.10-1.90), having had sex (AOR 1.32; 95%CI:1.15-1.51) and being exposed to NBCP (AOR 1.50 95%CI:0.91-2.48). Predictors of men's willingness to be circumcised were being Shona (AOR 1.27; 95%CI:1.14-1.40) and being HIV-positive (AOR 3.06; 95%CI:1.17-9.16). Predictors of willingness for male partner to be circumcised were being Shona (AOR 1.47; 95%CI:1.10-1.96), education (>0.081), MC knowledge (AOR 1.12; 95%CI: 0.99-1.27).

Conclusions: Knowledge of MC as an HIV prevention intervention is sub-optimal. People exposed to the NBCP had higher levels of MC knowledge. Men, women and providers in the DR may be accepting of MC.

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MOPE0352

Attitudes, beliefs and intentions around neonatal male circumcision (MC) as an HIV prevention intervention: results from a representative sample of rural Zimbabweans

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Background: Neonatal MC carries the same HIV prevention and other health benefits as adult MC but is done before the individual becomes sexually active. Neonatal MC is easier, quicker and safer than adult MC and can be done by health care cadres other than doctors. The objective was to assess attitudes and intentions related to neonatal circumcision among rural Zimbabweans.

Methods: A representative survey was conducted in six districts in two rural provinces. The survey was to evaluate Zimbabwe's National Behaviour Change Programme. All 18-24 year olds and one in three 25-44 year olds living in selected enumeration areas were invited to participate. Participants completed a questionnaire. Logistic regression was used to predict willingness to have son circumcised if it prevented HIV.

Results: 2,746 adults (64% females) participated (87% of eligibles). 60% said that they would have their son circumcised if MC was effective in preventing HIV. Among those who would not, 39% did not believe it would be effective, 19% said it was not culturally/religiously acceptable and 13% said their son should decide when older. 12% had high levels of MC knowledge (6/8 correct responses), 32% medium (3–5 correct) and 57% low levels (1–2 correct). 86% of men and 79% of women with high knowledge were willing to have their sons circumcised compared to 47% and 57% of those with low knowledge. Predictors of willingness to have son circumcised among men were MC knowledge (adjusted DR 1.32;95%CI:1.22-1.44) and being HIV-positive (AOR 2.00;95%CI:1.08-3.69). Among women, predictors were MC knowledge (AOR 1.11;95%CI:1.02-1.25), HIV knowledge (AOR 1.10;95%CI:1.01-2.19) and being HIV negative (AOR 1.16;95%CI:1.10-1.35). Knowledge of circumcision was sub-optimal. The majority thought neonatal circumcision was acceptable. Knowledge of MC and HIV plus knowing one’s HIV status were predictors of willingness to circumcise. These findings will be used to plan neonatal MC.

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MOPE0353

Safety and circumcision patterns in Tanzania

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Background: Circumcision is an effective intervention for HIV prevention in men. However, there is a dearth of information regarding the cultural attitudes and practices towards circumcision. This assessment assessed the extent and pattern of circumcision practices in selected areas of Tanzania.

Methods: A cross-sectional and descriptive study was conducted to assess the context, extent and pattern of circumcision practices in selected areas of Tanzania. Face-to-face questionnaires addressed to males and females in the community were administered to elicit information regarding the context, extent and pattern of circumcision practices in the study area.

Results: Almost 55% of the males reported being circumcised. Of those circumcised, 98%, 44% and 20% were circumcised in Tarime, Bukoba Rural and Tanga districts respectively. Considering a birth cohort, by the time the cohort is 5 years old, 21%, 5% and 7% of the boys would be circumcised in Tarime, Bukoba Rural and Tanga districts respectively. However, by the time the cohort is 18 years old, 25%, 35% and 15% of all boys in Bukoba Rural, Tarime and Tanga districts had been circumcised respectively.Almost 37% of those circumcised in Tarime, 44% in Bukoba Rural and 100% in Tanga district were circumcised in the health facility setting. Complications such as excessive bleeding (69% Tarime, 41% Bukoba Rural); infections (69% Tarime, 47% Bukoba Rural); and disfigurement (68% Tarime, 45% Bukoba Rural) were reported in the two districts due to traditional circumcision practices.

Conclusions: Age at circumcision varied with the reasons for circumcision. Traditional circumcision was associated with high levels of complications. There is a need to ensure that circumcision is safe by engaging the tribal leaders and traditional circumcisers on how best to reduce complications without compromising cultural and social significance of traditional circumcision practices. The national MC programme should take into account the various traditional MC practices.

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MOPE0351

A qualitative study to assess the acceptability, perceptions and knowledge of the benefits of male circumcision to reduce the risk of HIV infection among men, women and health providers in the Dominican Republic

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Background: Male circumcision (MC) reduces the risk of acquiring HIV, herpes simplex type 2 and human papilloma virus in men, as well as, chlamydia, trichomonas and bacterial vaginosis in female partners. The objective of this study was to characterize the knowledge and acceptability of MC in health providers, men and women of the province.

Methods: The study was conducted in five municipalities of the Altaragua Province. 13 focus group discussions (FGD) were conducted, 6 with women and 7 with men, each consisting of 6–10 participants (mean=7.9, SD=1.3). Groups were divided into “younger” (18-25 years) and “older” (26-50 years). Half of the FGD were conducted in rural settings. One FGD was conducted with providers, men and women of the province.

Results: The most common reasons reported for getting a MC were to correct problems in retracting the foreskin and to improve hygiene. Half of the participants viewed lack of penile hygiene as harmful to health and a source of “infections.” About half of the men believed that circumcision increases sexual pleasure. Nearly all women favoured a circumcised man, citing hygiene and esthetics as the main reasons for their preference. The majority of women thought that circumcised men experience more pleasure during sex. The lack of awareness about the benefits of MC to reduce the risk of HIV infection was universal. Almost half the participants believed that men would be willing to be circumcised. There was universal agreement among providers and STI providers in the province regarding the benefits of MC. All were willing to be trained to provide MC services.

Conclusions: Men, women and providers of the DR may be accepting of MC. Education about the benefits of the procedure are needed in the community. Introducing MC in the DR may help decrease the incidence of HIV and other STI's and their complications.

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MOPE0354
Integration of male circumcision (MC) with existing HIV prevention programs in Zimbabwe using HTC as an entry point for HIV-negative men to undergo MC
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Issues: Male circumcision (MC) is an effective intervention for the primary prevention of HIV. Providing MC to HIV-positive men is not recommended due to limited public health benefit, increased risk of HIV transmission with resumption of unprotected sex during wound healing, and greater risk of complications. Uptake of HIV testing and counseling (HTC) among MC clients has been low in Zimbabwe. Routine offer of HTC during the MC process as well as recruitment to continue using existing HTC services as entry point to MC for HIV negative men opting out.

Description: Population Services International manages a network of HTC services that reach over 35,000 Zimbabweans each month. With the introduction of MC services, potential clients are recruited through HTC services. HIV-negative men and couples are routinely offered MC counseling and referral. Out of the 3304 men circumcised between May 2009 and January 2010, 2,582 (77%) were referred through HTC centers. Men who presented for MC with unknown HIV status were routinely offered HTC and uptake was high, with only 18 (2%) of the 753 men accessing MC without prior HIV testing opting out.

Lessons learned: MC should be perceived as part of existing HIV prevention services at HTC during the MC process as well as recruitment of HIV-negative men through existing HTC facilities in Zimbabwe means that high proportions of MC clients are of known HIV status and low numbers of HIV-positive men are being circumcised.

Next steps: With MC services scale-up in Zimbabwe, the program will continue to use HTC services as entry point to MC for HIV-negative men to ensure integration between MC and HTC programs.

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MOPE0355
Scaling up male circumcision in a non-circumcising country: the case of Zambia
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Issues: Zambia is at the epi-centre of the HIV pandemic with prevalence and incidence rates of 14.3 and 1.8%, though the prevalence has declined in the past few years, this represents a very large pool of people living with HIV (PL-HIV). Like most countries in Southern Africa with a large HIV burden, Zambia has a low male circumcision (MC) rate (17%). Ministry of Health has adopted MC as part of a comprehensive HIV prevention strategy. A situational analysis using the WHO tool-kit was undertaken, since most of the country is non-circumcising other than NorthernWestern (71%) and Western (46%) provinces. Some of the challenges identified were:

1. Acute human resource shortage
2. Inadequate theatre and counselling space
3. Replenishment of consumables
4. A lack of guidelines

Description: Assessment was done using a variety of methods: key informant interviews, focus group discussions, records review and stakeholder analysis in rural and urban settings in the 9 provinces

Lessons learned:

• Stigma against MC in non-circumcising provinces as it is deemed a taboo cultural practice that borders on ethnic identity
• It is deemed painful and may reduce pleasure
• Some believe it offers 100% protection against HIV
• MC intervention should be perceived as part of existing HIV prevention programs

Next steps: 1. Engage leadership in non-circumcising communities
2. Targeted and community-specific MC mass media campaigns to address stigma, ethnicity, HIV testing and other identified issues
3. Resource mobilisation for consumables, training and other needs
4. Formulate innovative MC entry points

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MOPE0356
Parental and adolescent issues associated with male circumcision of adolescents in Zimbabwe
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Background: Male circumcision (MC) clearly reduces female to male transmission of HIV, and should be considered as part of comprehensive HIV prevention programs in countries where HIV is hyperendemic, heterosexually transmitted, and most men are not circumcised. Modeling shows young adult men (13-25) should be prioritized for MC, for high impact on the AIDS epidemic. No national level MC programs have been implemented in SSA. Because parents have decisional authority over their children’s health care, it is important to determine what effects MC adoption among parents as well as consider adolescents’ opinions for programs to achieve high MC acceptance.

Methods: Qualitative interviews were done with parents (n=64) of adolescent boys and adolescent boys (n=32) in urban/rural and Shona/Ndebele areas in Zimbabwe. Qualitative analyses established factors affecting MC motivation.

Results: Results show that parents and adolescents concurred that MC is “foreign”, should be performed by trained doctors, in clinics. Traditional MC is largely seen as unsafe. They also concurred on positive issues, such as hygiene, prevention of STIs, and negative issues such as non-sterile practices, possible ‘mutilation/injury’ or complications. Adolescents were more focused on pain and the stigma of ‘being different’ than parents were. Parents were more likely to say MC for younger children is good, before they start to be ‘mischievous’. Disinhibition was also seen as a bigger problem if one waits until men become sexually active. Parents and adolescents thought it would be harder to convince men to have MC once they had become sexually active.

Conclusions: Parents will have a large impact and adolescents have key opinions on adoption of MC as an HIV prevention strategy for adolescent boys. Programs considering MC implementation must target them with suitable messages to increase adoption, ensuring program success. A national representative survey will be conducted with 9,080 Zimbabweans to ascertain drivers of MC adoption decisions.

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MOPE0357
Traditional rather than medical circumcision is preferred by the amaXhosa tribe in South Africa
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Background: Recent experimental evidence has demonstrated the benefits of male circumcision for the prevention of human immunodeficiency virus (HIV) infection. Traditional circumcision is practiced amongst the amaXhosa in South Africa as part of a rite to manhood. A study was conducted in Cape Town, a Xhosa speaking region to understand the potential role or impact of traditional circumcision in HIV prevention.

Methods: After consent, participants were asked their circumcision status, their attitudes to and knowledge about MC, and their circumcision practices. A situational analysis using the WHO tool-kit was undertaken, since most of the country is non-circumcising other than NorthernWestern (71%) and Western (46%) provinces. Some of the challenges identified were:

1. Acute human resource shortage
2. Inadequate theatre and counselling space
3. Replenishment of consumables
4. A lack of guidelines

Description: Assessment was done using a variety of methods: key informant interviews, focus group discussions, records review and stakeholder analysis in rural and urban settings in 9 provinces

Lessons learned:

• Stigma against MC in non-circumcising provinces as it is deemed a taboo cultural practice that borders on ethnic identity
• It is deemed painful and may reduce pleasure
• Some believe it offers 100% protection against HIV
• MC intervention should be perceived as part of existing HIV prevention programs

Next steps: 1. Engage leadership in non-circumcising communities
2. Targeted and community-specific MC mass media campaigns to address stigma, ethnicity, HIV testing and other identified issues
3. Resource mobilisation for consumables, training and other needs
4. Formulate innovative MC entry points

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MOPE0358
Clinician issues associated with recommending male circumcision to young men and parents of adolescents in Zimbabwe
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Background: Male circumcision (MC) clearly reduces female to male transmission of HIV, and should be considered as part of comprehensive HIV prevention programs in countries where HIV is hyperendemic, heterosexually transmitted, and most men are not circumcised. Modeling shows young adult men

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XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria

135

Monday 19 July
Poster Exhibition

Tuesday 20 July
Author Index

19 July

Tuesday

135
men (13-25) should be prioritized for MC, for high impact on the AIDS epi-
demic. No national level MC programs have been implemented in SSA. Since
circumcision is a critical part of a successful HIV prevention program, it is im-
portant to determine what factors affect their recommendation of MC to young
men and women of adolescents.

Methods: Qualitative interviews were conducted with hospital, primary care, and
antenatal clinics (n=93) in urban/rural, and Shona/Ndebele areas in Zimbabwe.
Interviews were guided by the Integrated Behavioral HIV/AIDS Qualitative
analyses established factors affecting MC motivation.

Results: Qualitative analysis found 2/3 of clinicians expressed concern that
MC goes against religious/national norms, while nearly all felt MC protects against
HIV. Staff stated positive attributes of MC and “better than other HIV prevention strategies,” while 20% felt it may improve strength/
health. Only 4% indicated MC was unprotected with condoms. Other
negative attributes include false sense of security (1/3), complications (3/4),
effect on manhood (1/5). Important sources of influence on MC adoption
mentioned include family, clinicians, church, media, government, and elders.
Facilitators noted included trained staff, appropriate venues, proper equip-
ment/supplies, and MC promotion; barriers include lack of funding, trained
personnel, health system constraints, lack of public knowledge.

Conclusions: Clinicians will likely have a large impact on parents of adoles-
cents and young men’s adoption of MC as an HIV prevention strategy.
MC programs must work with clinicians to provide suitable messages to maximize
clinician support and ensure program success. Findings have informed design
of a survey to be conducted with 9,000 Zambians to ascertain drivers of
MC adoption decision.

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MOPE0359
Supply chain management system and standard list of commodities required to scale up male circumcision service for HIV prevention

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Issues: The scale-up of male circumcision (MC) for HIV prevention across
Eastern and Southern Africa will require a heavy investment in health care
infrastructure, commodities and supplies in order to circumcise almost 28
million men over the next 10 years. A standardized list of commodities and
supplies was developed to meet MC needs in an efficient and cost effective
manner.

Description: In May 2009, PEPFAR, in collaboration with WHO-UNAIDS, or-
ganized a meeting of implementing partners in order to discuss locational
requirements to supply country programs and to produce a comprehensive list
of commodities. Three kits options and modules were designed to meet varying
in-country needs (three surgical technique and reusability of surgical instru-
ments). The standard list of commodities that have been developed include
surgical instruments, disposable supplies for procedures, infection prevention
supplies, and emergency toolkits. The PEPFAR’s Supply Chain Management
System (SCMS) project has been working to finalize products specifications,
finalizing various kit options, vetting vendors, assessing quality of sample
kits.

Lessons learned: Countries’ decision making related to surgical technique
(forces guided, dorsal slit, or sleeve resection), reusability of surgical instru-
ments, use of electrolytary, service delivery setting, and targeted number of
men to be circumcised all impact the choice of commodities and the cost
efficiency of programs. Bundling commodities into ‘kits’ containing the instru-
ments and supplies for a single surgery may ease procurement, distribution,
and inventory tracking, as well as clinical use. Distribution relies upon host
country governments to facilitate importation of necessary commodities. No single organization, country or donor can simply achieve the
scale and scope of activities to realize maximum efficiency; consensus and
collaboration are required.

Next steps: SCMS project will deliver the first order of 60,000 MC ‘kits’ in
Zambia and Kenya. Pilot testing is planned and cost comparisons will be
made to demonstrate system efficiencies. PEPFAR through SCMS will extend
support to other countries as requested in collaboration with WHO.

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MOPE0360
The (mis)reporting of male circumcision status by men and women in Zambia and Swaziland

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Background: As male circumcision (MC) programs are scaled-up for HIV pre-
vention, measurement of MC prevalence in household-based surveys will be
critical. Given that verification of circumcision status through physical exami-
nation is unlikely to be acceptable, there is a need to assess the reliability of
self- and partner-reported MC status. This study sought to determine whether
self- and/or interview methods improve accuracy of reporting.

Methods: The study was conducted in Lasaka, Zambia and Mbabane and
Manzini regions in Swaziland. Among men aged 15-50, their female part-
dner and adolescent boys aged 13-17. Over 400 males and females in each country were
recruited in and around health clinics. Participants were randomized into one of
two groups: 1) control arm that provided a detailed verbal description of MC in a face-to-
face interview; and 2) an arm that provided an illustration of a circumcised and uncircumcised
genital during a face-to-face interview; and 3) an arm that provided the same illustration within the context of a com-
component MC (ITT) arm and a multivariate linear regression model with propensity
correlation of circumcision status by unreported cases. The respondents were requested to indicate visual
examination conducted by a trained clinician to verify their circumcision status.

Results: In Zambia and in Swaziland, preliminary findings show that between
5 and 9% of males reported they were circumcised when they were not. All
respondents in all arms reported their status was higher (7 to 19%), with the error in reporting occurring in both directions.

Conclusions: The illustration arm produced a better measure for those who had low levels of literacy, the differences were not consistently statisti-
cally significant.

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MOPE0361
Innovative approach to addressing juvenile offender STI issues

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Sexually transmitted disease prevalence among juvenile offenders is high, with
elated rates for females, particularly African American females. These youths
pose a significant risk of acquiring HIV/AIDS. With NIH funding, we
completed an innovative, 4-year study of juvenile arrestees processed at a
large central intake center (HIAC) in Tampa. Florida to: (1) determine the preva-
lence of Chlamydia and gonorrhea, (2) assess sexual risk behavior, and (3)
determine the factors affecting STI prevention and treatment. The HIAC provided
free treatment. Participants were 442 female and 506 male new arrestees processed at the
HIAC during the last half of 2006 - most were released back to the commu-
nity. In this sample, STI prevalence rates were found (females, 19.5%; males, 10.7%) with
higher rates among African American females and males. HIAC was a county health
department, and permanent fund-

ing provided for STD testing and treatment follow-up. STD results for 2772 youths through 1/21/10 indicated African American girls remain at highest STD
prevalence (24.3%), compared to non-African American girls (9.4%), African American males (11.6%), and non-African American males (3.0%).

Infection rates are highest among youths who are older, African American, and with a higher ED visit rate. Given the high rate of
acceptability of voluntary STD testing exists among arrestees.

We summarize the results of various multivariate analyses, and suggest new
research on: (1) STD epidemiology and risk behavior in juvenile offenders; (2) STD prevention service gaps; (3) strategies to facilitate service access;
and (4) individual and organizational barriers to implementing broader surveillance and more effective gender and race-specific STD services. “Front-
end” STD testing, treatment, and prevention juvenile justice-public health linkages by initiating youths’ contact with local health
departments, and improve resource allocations and more targeted placement of
STD prevention and treatment services.

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MOPE0362
Association of low-risk human papillomavirus infection with male circumcision in young men: results from a longitudinal study (ANRS-1265) conducted in Orange Farm, South Africa

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Background: Low-risk Human Papillomavirus (LR-HPV) is widespread in the
world and the main cause of genital warts, which are recurrent lesions that
affect quality of life. The objective of this study is to investigate the associa-
tion of LR-HPV infection with male circumcision (MC) among young men.

Methods: We used data from a MC trial (ANRS-1265) conducted in Orange
Farm (South Africa) among men aged 18 to 24. Urethral swabs were col-
clected during 262 consecutive days among participants from the interven-
tion (circumcised) and control (uncircumcised) groups who were reporting
for a scheduled follow-up visit at 21 months. Swabs were analyzed using PCR. LR-HPV genotypes Poisson mean rates were assessed with in-
tention-to-treat (ITT) univariate and multivariate log-Poisson regression, us-
ing background characteristics, sexual behavior and HIV and HSV-2 statuses as
cofactors.

Results: The mean number of LR-HPV genotypes was significantly lower in
the intervention group (0.30 vs. 0.18, univarite PMR 0.53, 95%CI 0.44 to 0.64, p<0.001). Results remained unchanged when controlling for confound-
ors (ITT adjusted PMR 0.54, 95%CI 0.44 to 0.66, p<0.001) as well as for propensity score. As treated adjusted PMR was 0.46, 95%CI 0.37 to 0.56, p<0.001. The mean number of LR-HPV genotypes increased with the number of lifetime partners, whereas it decreased with higher level of education and consistent condom use.
**MOPE0363**

**STI clinics as an important entry point for HIV prevention in Egypt: a model for the Middle Eastern region**

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**Issues:** While available evidence indicates that STI prevalence among vulnerable populations in Egypt is high, a lack of sexual health seeking behavior requires immediate action to prevent spread of STIs, including HIV. Data from the Cairo VCT center indicate that 5% of detected HIV cases were referred from the nearest STI clinic within El Haud El Marsoud Hospital.

**Description:** The Egyptian Ministry of Health partnered with Family Health International and the United Nations Population Fund to provide HIV testing services using the enhanced syndromic approach, adapted to the local context. Between June 2006 and December 2009, 1,746 male and female clients, and their partners, attended the STI Clinic.

**Lessons learned:** Venereal warts were the most common presenting condition and awaited treatment. Integration of STI services in a dermatology hospital helped in attracting clients, including females. Relatives or friends were the main motivator to visit the STI clinic (50.7%). Gender apparently plays a role in disclosure of STI status. More females intended to inform their partners (71.1% females vs 57.7% males) and were accompanied by a partner (24.1% females vs 10.2% males). The STI services represent an entry point to reach vulnerable populations. Of all STI clients, 6.5% reported to be MSM and 1.4% infected drugs. Moreover, about one third of males reported having more than one female partner while 90.3% of males reported never using condom with non-steady partner in last six months.

**Next steps:** Given that STIs can contribute to HIV transmission, it is important to improve health seeking behaviors by decreasing stigma, integrating STI services in health care facilities, using peers or friends to promote sero-disclosure and accept HRGs as they are. The PPP clinics and static clinics ensure and maintain high level of confidentiality of client information.

**MOPE0366**

**Routine HIV testing and counselling in the management of sexually transmitted infections: experience from Lighthouse**

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**Background:** Although sexually Transmitted Infections (STIs) have been shown to facilitate HIV acquisition and transmission, only 43% of the STI clients who were referred for HIV testing and counselling (HTC) from Bwaila STI clinic received HIV testing before June 2009. To address the gap, Lighthouse integrated HTC services in the management of sexually transmitted infections at Bwaila Hospital in accordance with the National STI Treatment Guidelines.

**Methods:** All STI patients were sensitized on the benefits of HTC using a standard Group Pre-Test Education (GPE). Those STI patients who consented to have an HIV test were directed to HTC room within STI clinic for the test. STI patients were given opportunity to accept or refuse HTC. Those who accepted were referred back for STI management and HIV-positive individuals referred for ART or other support services at Martin Preuss Centre.

**Results:** Between June and November 2009, a total of 4,738 STI patients were registered at the clinic of which 223 (4.7%) had already undergone HTC. A total of 4,218 (89%) underwent HTC of which, 972 (23%) tested HIV-positive and were referred for care.

**Conclusions:** The proportion of STI patients with a known HIV status is very low. The integration of HTC services in the management of STIs increases HTC uptake.

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**MOPE0365**

**Increased STI/RTI service uptake among high risk groups (HRGs) following the introduction of a preferred private practitioner (PPP) model of STI/RTI service delivery in Kerala, India**

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**Issues:** Timely treatment of Sexually Transmitted infections and Reproductive Tract Infections among High Risk Groups (HRGs) that include Female sex workers and Men having sex with men reduces HIV transmission significantly. Stigma, judgmental attitude of the health care providers, long distances to service sites, inconvenient hours and lack of awareness about STIs and their symptoms, lead to poor STI/RTI service uptake by the HRGs covered by Targeted intervention (TI) programs in the state of Kerala.

**Description:** STI/RTI care to HRGs by 21 government designated clinics in Kerala has poor service utilization. In 2009, TI projects started providing STI/RTI services through 33 static clinics which made minimal progress. To overcome these issues, the following successful steps were initiated:

- According to a national plan, a Preferred Private Practitioners (PPP) model was introduced in the state in October 2009. 240 Doctors were contracted by the TI projects to provide STI/RTI care to HRGs at easily accessible and convenient locations to HRGs. All HRGs are referred to the PPP for free STI/RTI consultation, screening, treatment and follow-up services. Complementary services are provided through static clinics and linkage with government hospitals.
- Preferred practitioners and staff were trained to have a non-judgmental attitude and accept HRGs as they are.
- The PPP clinics and static clinics ensure and maintain high level of confidentiality of client information.

**Lessons learned:**

- PPP model increases the STI/RTI Service delivery points and access to services.
- Outreach and wide-spread STI services for HRGs at convenientlocations and hours proved to be advantageous.
- Between October to December 2009, individual visits to the clinics for STI screening increased steeply from 2808 to 21086; HRGs who had regular medical checkup increased from 3316 to 8278.

**Next steps:** PPP model network with comprehensive STI/RTI services, should be expanded to more locations for risk reduction among HRGs.

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Pre-exposure and post-exposure prophylaxis

MOPEx0368 Correlates of sexually transmitted infections (STIs) in an HIV infected population on highly active antiretroviral therapy in South Africa (SA)
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Background: SA has a high prevalence of STIs and the highest population of people living with HIV (PLHIV) in the world. Presence of STIs increases transmission and acquisition of HIV. Therefore, the effective management of STIs is an important strategy in the prevention of HIV. Understanding the prevalence of STIs in an HIV infected population in clinical care and identifying correlates of these STIs can guide STI control and HIV prevention strategies.

Methods: A total of 924 participants (44% men; 56% women) from 16 clinics in KwaZulu Natal were consecutively enrolled into the study. All participants with an HIV infected and stable on HAART. Socio-demographic data was collected using an audio-computer-assisted self interview (ACASI) program. Polymerase chain reaction (PCR) testing was done for selected commonly occurring STIs causative microbes - Neisseria gonorrhoea and Chlamydia trachomatis in men and women and Trichomonas vaginalis in women. Data was examined for univariate associations (p < .05) between the presence of STIs and factors related to demographics and other potentially clinically meaningful determinants.

Results: The prevalence of selected STIs in this clinical population was 12.2% with women disproportionately affected (8.2% men; 91.8% women), and with a predominance of Trichomonal infection (81% of infections) among women. Univariate logistic regression analyses of the sample population revealed that the presence of STIs was significantly associated with recent unprotected sex, unemployment, younger age, perceived HIV stigma, threatened or actual physical abuse, consultation with traditional healers, length of ARV exposure, and infrequent contact with counselors.

Conclusions: The prevalence of STIs among HIV infected people in SA is high despite being in clinical care. Findings from this investigation can be used to guide the development of prevention strategies aimed at reducing the burden of STIs which will impact on HIV transmission.

MOPEx0369 Safety and adherence to intermittent emtricitabine/tenofovir for HIV pre-exposure prophylaxis (PrEP) in Kenya and Uganda
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Background: Little is known about safety and adherence to intermittent PrEP regimens which are more feasible than daily dosing in some settings. We present preliminary data on the safety and adherence to daily and intermittent FTC/TDF among Kenyan MSM/FSW and Ugandan HIV discordant couples (DC).

Methods: MSM, FSW (Kenya) and HIV-uninfected partners in DC (Uganda) were eligible. FTC/TDF is given on Monday, Friday and within 2 hours after sex, not to exceed one dose per day) FTC/TDF or placebo in a 2:1:2:1 ratio and are being followed monthly with standardized adherence and risk reduction counseling, HIV testing, and safety evaluation for 4 months. Adherence is assessed with medication event monitoring system (MEMS). Sexual activity data are collected via daily text message (SMS) reminders.

Results: 67 MSM, 5 FSW and 32 DC (24:MF:8) have been enrolled to date. Data for 37% of follow-up visits are reported, blinded to drug/placebo assignment. All adverse events (AEs) were mild or moderate with most judged unlikely related or not related to study drug/placebo. Both dose regimens had similar rates of AEs. No significant renal dysfunction was found. No drug-related Serious Adverse Events were reported. Median (inter-quartile range) unadjusted MEMS adherence to daily dosing of FTC/TDF was 50% (44-56) in DCs, while adherence to any post-coital dosing was 54% (50-58) in MSM/FSW and 91% (84-114) in DCs. Unadjusted adherence to fixed intermittent dosing was 66% (50-88) in MSM/FSW and 91% (84-114) in DCs, the median age of enrollees was 31 years (range, 20-59), 79% were male, and 87% had completed primary school. At month 12, 11% were lost to fol-

MOPEx0370 Acceptability of a pre-exposure prophylaxis trial among French gay men
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Background: Pre-exposure Prophylaxis (PrEP) is a strategy to control HIV transmission in vulnerable groups. The possibility of a blinded placebo PrEP trial is currently being discussed in France to assess the efficacy of exposure to antiretroviral treatment before and immediately after possible HIV sexual exposure among gay men. To assess the acceptability of participating in the trial, a survey was carried out among gay men in contact with the main French AIDS NGO (Aides).

Methods: Between June and August 2009, a self-administered questionnaire was provided to all gay men participating in French prevention activities. It gathered information about sexual behavior, inconsistent condom use, acceptability of participating in the trial, perceived barriers and incentives to participation, and finally sociodemographic information. A logistic regression was used to identify factors associated with high/good acceptability of participating in the trial.

Results: Among the 527 individuals enrolled, 443 reported to be HIV-negative and gay men were included in the questionnaire. Median age and years of education were 37 and 14 respectively. The median(IQR) number of sexual partners during the previous 12 months was 10(2-20); 25% of participants reported inconsistent condom use during the previous 12 months with their sexual partners; 40% had high/levels of acceptability to enter the trial. Factors independently associated with high/good acceptability of participating were as follows: less than 14 years of education (AOR=1.60[1.05-2.44]), a higher number of sexual partners (AOR=1.01[1.01-1.02](additional partner), inconsistent condom use with sexual partners during anal sex (AOR=1.66[1.03-2.66]) and availability of a specifically devoted site in the hospital for PrEP follow-up visits (AOR=2.91[1.32-6.29]).

Conclusions: Acceptability of participating in a PrEP trial seems high among gay men, especially those who report risky behaviors. Providing confidentiality during follow-up seems to be a major incentive. Reinforced counseling to promote preventive strategies should be proposed to all participants enrolled in the trial.

MOPEx0371 Enrollment and follow-up of injecting drug users in an HIV pre-exposure prophylaxis trial in Bangkok
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Background: The Bangkok Tenofovir Study is an ongoing randomized, double-blind, placebo-controlled, endpoint-driven trial to determine if daily oral tenofovir use is safe and effective in preventing HIV infection among injecting drug users (IDUs). We present preliminary data and adherence data through November 2009.

Methods: The trial is conducted in 17 Bangkok Metropolitan Administration drug treatment clinics. Eligible IDUs (N=2400) are randomized (1:1) to receive daily tenofovir or placebo. Participants are provided with direct and blinded to follow-up, and adherence data through November 2009.

Results: The trial is conducted in 17 Bangkok Metropolitan Administration drug treatment clinics. Eligible IDUs (N=2400) are randomized (1:1) to receive daily tenofovir or placebo. Participants are provided with direct and blinded to follow-up, and adherence data through November 2009.

Conclusions: Acceptable adherence to PrEP follows-up visits is defined as missing 3 or more consecutive monthly visits. An independent data and safety monitoring board (DSMB) conducts safety and efficacy reviews.

Results: From June 2005 through November 2009, 3939 IDUs were screened and 2230 (59%) enrolled. Reasons for screen failure included HIV infection (11%), elevated ALT or AST (10%), and chronic hepatitis B infection (6%). The median age of enrollees was 31 years (range, 20-59). 79% were male, and 87% had completed primary school. At month 12, 11% were lost to fol-
MOPE0374 Update on the FEM-PrEP trial

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Background: Antiretroviral pre-exposure prophylaxis (PrEP) is a promising new tool in HIV prevention.

Methods: FEM-PrEP is a placebo-controlled, multi-center PrEP clinical trial to assess the safety and effectiveness of daily oral TDF in preventing HIV acquisition among women. Proposed sites include: Bondo (Kenya); Pretoria and Bloemfontein (South Africa); Arusha/Moshi (Tanzania); Lusungu and Blantyre (Malawi) and Mzabuka (Zambia). Women come for screening, enrolment and 15 follow-up visits (13 on product use) over 14 months and are required to use an effective contraceptive method at enrolment and meet the criteria of “at high HIV risk” defined in the protocol. Women who become HIV-infected on trial are reviewed for 12 months post infection.

Results: As of December 9, 2009, there were 1,116 women screened and 373 (33.4%) enrolled in the two initiated sites. Bondo started enrolment in June 2009 and has had a mean enrolment of 52 women per month. Pretoria started enrolment in August 2009 and has had a mean enrolment of 22 per month. Nearly half of the screening failures (359 (48.3%) were due to being HIV-positive. Of the 547 women tested for HBsAg at screening, 35 (6.4%) were positive. The main enrolment contraceptive method was injectables (66.2%) followed by oral contraceptive pills (30.0%). There have been 17 temporary product withdrawals (6 due to an AE and 11 for positive pregnancy test) along with 7 permanent withdrawals. During the vitamin run-in segment between screening and enrolment 92.6% reported taking the study pill was easy or very easy; similar to 96% reported during follow-up. Focus group discussions with Bondo community stakeholders indicate overall community support for the intervention.

Conclusion: Enrollment has been steady in Bondo but lower than expected in Pretoria. Women report it is easy to take the study product. Use of injectable contraceptives should minimize time off study and product use due to pregnancy. Presenting author email: wrautberg@fhi360.org

MOPE0375 Barriers to accessing and utilization of post-exposure prophylaxis to mitigate HIV infection among sexual violence survivors in post-conflict Northern Uganda

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Issues: Violence against women has severe physical and psychological repercussions. In conflict and post-conflict areas, it is also exacerbated by war-related factors and collapse of social networks following population displacements. Women who become HIV-infected as a result of GBV are at higher risk of acquiring HIV infection in post-conflict Northern Uganda. HIV prevalence in post-conflict Northern Uganda is 8.2% as opposed to the national average of 6.4% and was found higher among females (9%) than males (7.2%). In the region, services for GBV survivors were generally poor and inadequate.

Description: In 2009 our Program trained and supported 920 community-owned resource persons (community animators) in 26% of all sub-counties of 29 districts in 10 sub-counties within 10 districts, to create awareness, identify GBV cases and refer them for relevant services including Post-exposure Prophylaxis (PEP). The program has also supplied 29 ART sites for the provision of PEP to sexual violence cases. Counseling was also provided for health workers to improve management of sexual violence cases including prevention of pregnancy and HIV/AIDS. The program also liaised with other actors like the Uganda police, United Nations Population Fund and Ministry of Gender to review and provide recommendations and guidelines as well as conduct advocacy on GBV-related issues.

Lessons learned: During 2009, 1,372 GBV cases were reported of which 321 were rape and defilement eligible for PEP but only 18 survivors accessed PEP. Survivors reported distance from health units, unavailability of ARV tagged for PEP for survivors, negative attitudes among health workers, obstruction to services by parents/guardians and uncoordinated referral system between the police and health units as the key barriers to access and utilization of PEP.

Next steps: As plans to supply health units with ARV supplies are ongoing, it is important to better coordinate services offered to GBV survivors, to build the skills of the police force to manage GBV clients and to effectively strengthen referral systems. Presenting author email: rkangago@numatuganda.org

MOPE0376 Attitudes and program preferences regarding pre-exposure prophylaxis (PrEP) among young adults at risk for HIV

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Background: Impending PrEP trial results underscore the critical need to understand acceptability of PrEP or ‘Pre-Exposure Prophylaxis,’ particularly in high-risk populations such as African-American youth. This paper presents the results of focus groups conducted with at-risk youth in Atlanta regarding PrEP program design preferences, in order to prepare for roll-out of PrEP, should trial results be positive.

Methods: During the summer of 2009, 10 focus groups were conducted with 77 at-risk African American youth in Atlanta, GA, ages 18-24. Participants for 8 of the mixed-gender focus groups (58 participants) were recruited by
MPOE0377
The partners PreP study: enrollment of HIV-1 serodiscordant couples into a phase III, randomized trial of antiretroviral pre-exposure prophylaxis for HIV-1 prevention
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Background: Pre-exposure prophylaxis (PrEP), in which an HIV-1 uninfected person takes an antiretroviral medication to prevent against acquiring HIV-1, is a promising biomedical HIV-1 prevention strategy that is being tested in large efficacy trials worldwide. HIV-1 transmission risk is high in HIV-1 serodiscordant couples, and uninfected members of serodiscordant couples would likely be a priority population for PrEP implementation. If PrEP is safe and efficacious in ongoing trials.

Methods: Partners PreP Study is a randomized, double-blind, placebo-controlled, three-arm clinical trial of tenofovir and combination emtricitabine-tenofovir PrEP conducted among heterosexual African HIV-1 serodiscordant couples. HIV-1 infected partners must not qualify for antiretroviral therapy based on national guidelines at the time of study entry and are deferred for ART need to be treated in ongoing PrEP studies. HIV-1 uninfected partners must be healthy and take daily study drug. Couples are recruited from 9 sites in Kenya and Uganda. Enrollment into the trial is ongoing through late 2010, with a target sample size of 4700 couples.

Results: Between July 2008 and February 2010, 5135 HIV-1 serodiscordant couples were screened and 3189 were enrolled. For 2031 enrolled couples (63%), the HIV-1 serosensitive partner was female. Median age was 35 years for HIV-1 seronegative (IQR 29-42) participants and 34 years (IQR 28-41) for HIV-1 seropositive participants. Most couples (98%) were married, with a median duration of partnership of 8 years (IQR 3-15) and had learned of their serodiscordant status a median of 0.6 years earlier (IQR 0.1-2.1). Couples reported a median of 4 sex acts (IQR 3-6) during the month prior to enrollment, and unprotected sex was reported by 22%. The median CD4 count of HIV-1 infected partners was 495 cells/µL (IQR 369-655).

Conclusions: Serodiscordant couples are motivated to participate in an HIV prevention trial using PrEP, with over 5000 serodiscordant couples screened and over 3000 enrolled to date. Preparing author email: cecilium@uw.edu

MPOE0378
Reported risk behaviors among injecting drug users participating in an HIV pre-exposure prophylaxis trial in Bangkok
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Background: Participants in HIV prevention trials may think trial participation reduces their risk of HIV infection and engage in activities that put them at risk of HIV infection. We examined participant risk data from the Bangkok Tenofovir Study to determine if HIV-associated risk behavior increased during the trial.

Methods: The Bangkok Tenofovir Study is an ongoing randomized, double-blind, placebo-controlled study using tenofovir disoproxil fumarate in 17 Bangkok Metropolitan Administration drug treatment clinics to determine if tenofovir prevents HIV infection among injecting drug users (IDUs). Participants receive risk reduction counseling and HIV testing monthly and have access to methadone treatment, condoms, and bleach with instructions on how to clean needles. Participants were enrolled if they were at least 18 years old, with AIDs demographic characteristics were assessed at enrollment and all risk behaviors (i.e., injecting drugs, sharing needles/syringes, sexual activity) at enrollment and every 3 months thereafter. We used generalized estimation equation logistic regression to examine risk behavior.

Results: From June 2005 through November 2009, 2320 persons enrolled; median age was 31 years (range, 20-59), 79% were male, and 87% had completed primary school. A total of 945 participants completed 36 months of follow-up; enrollment, 588 (62%) reported injecting drugs during the previous 3 months; 282 (48%) injected methamphetamine, 237 (40%) midazolam, and 220 (37%) heroin. No positive for HIV infection decreased from 62% to enrollment at 19% to month 36, sharing from 14% to 2%, and unprotected sex with casual partners from 18% to 8% (all, p < 0.0001). Focus of injecting drugs, sharing needles, and unprotected sex declined during trial follow-up. This decline is likely due to the methadone maintenance program. Methamphetamine is the most common drug injected. Despite decreases in reported risk behaviors, some adolescents reported using these drugs and the potential for HIV infection and there is an urgent need for additional effective interventions to prevent HIV infection. Presenting author email: suppakh@yahoo.com

MPOE0379
Early toxicity profile of participants in the FEM-PreP trial in Bondo, Kenya
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Background: There is an urgent need for a safe, woman-initiated method of HIV prevention. FEM-PreP, a phase 3, blind, placebo-controlled, clinical trial of oral Truvada for HIV prevention in women, is being conducted in five countries in sub-Saharan Africa.

Methods: Participants are randomized 1:1 to daily oral Truvada® or placebo and followed up every 4 weeks with chemistry assessed at weeks 4, 12, 24, 36 and 52. Inclusion criteria include age 18-35 years, being at higher risk of acquiring HIV infection through sexual intercourse, having a negative HIV antibody test (due to participants with a positive HIV test at enrollment are deferred for ART need to be treated in ongoing PrEP studies). HIV-1 uninfected participants must be healthy and take daily study drug. Couples are recruited from 9 sites in Kenya and Uganda. Enrollment into the trial is ongoing through late 2010, with a target sample size of 4700 couples.

Results: Between July 2008 and February 2010, 5135 HIV-1 serodiscordant couples were screened and 3189 were enrolled. For 2031 enrolled couples (63%), the HIV-1 serosensitive partner was female. Median age was 35 years for HIV-1 seronegative (IQR 29-42) participants and 34 years (IQR 28-41) for HIV-1 seropositive participants. Most couples (98%) were married, with a median duration of partnership of 8 years (IQR 3-15) and had learned of their serodiscordant status a median of 0.6 years earlier (IQR 0.1-2.1). Couples reported a median of 4 sex acts (IQR 3-6) during the month prior to enrollment, and unprotected sex was reported by 22%. The median CD4 count of HIV-1 infected partners was 495 cells/µL (IQR 369-655).

Conclusions: Serodiscordant couples are motivated to participate in an HIV prevention trial using PrEP, with over 5000 serodiscordant couples screened and over 3000 enrolled to date. Preparing author email: cecilium@uw.edu

MPOE0380
High incidence of occupational blood exposures (OBE) in the health care sector of low income countries, using the example of Bangui, Central African Republic (CAR)

Context: CAR has been heavily affected by HIV (6.2%) and hepatitis B (14%) and C (3%), but has not yet developed a prevention plan against OBE, even though its health care staff, already low in numbers, is overwhelmed by a massive patient load.

Objectives: This study aims to assess the current OBE situation and develop a national plan for the management of these accidents.

Methods: A preliminary cross-sector study was conducted in 2009 amongst 3 health care facilities groups in Bangui. The parameters being studied were collected using a standard form including serological status for HIV, HBV and HCV, vaccination against hepatitis B, incidents of OBE and their subsequent management.

Outcomes: Three hundred members of the health care staff were included in the study. 9.2% had been vaccinated against hepatitis B. Thirty six percent (36%) had already been tested for HIV, with 7.3% of the tests performed within the last three months. Fifty four percent (54%) cited an incident of OBE within the last six months. Seventy one percent (71%) had received accidental needle stick injuries. At the time of the accident, 39.9% knew their hepatitis B status, 54% their HIV serological status, and 32% their HBV status. Thirty percent had been vaccinated against hepatitis B. Three percent (3%) of the accidents received subsequent care. The post-OBE care management did not cover hepatitis B.

Conclusions: There is a high prevalence of OBEs in the sites studied. The number of health care staff receiving subsequent care is low. As this study was limited to Bangui, it is recommended to conduct a survey in the entire CAR. Meanwhile, given the current results and the aim of safeguarding the over-stretched health care staff from OBEs, efforts are required to strengthen staff capacities, manage OBEs and improve hospital hygiene in the sites studied. Presenting author email: dalia_m2003@yahoo.fr

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MOPE0381
Postexposure HIV/STI prophylaxis for victims of rape: an emergency attention program in Mexico City
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Background: Non consent sexual intercourse increases the risk of HIV to victims, as mucosal lacerations and bleeding is greater in this conditions. In Mexico City, four rapes are denounced daily. In December 2008 postexposure program (PP) for victims of rape was established by the Mexico City HIV/AIDS Program Clínica Condesa (CC) in coordination with the Judicial System (Policies Station) in order to give medical attention, prevention and screening of HIV, pregnancy and STI and psychological and legal counseling to victims of rape.

Methods: 1. Training workshops for police stations stakeholders, to provide in situ PP (a special container with initial HAART and emergency contraception pills was provided to all police stations), afterwards victims are referred to CC for clinical and laboratory follow-up.
2. Follow-up of 28 victims HAART for 28 days and STIs prophylaxis, consent and confidential HIV, Hepatitis B, Hepatitis C and Syphilis tests were performed. The victims were followed up for three and six months after rape. If needed reference for legal abortion

Results: During the first year of the program, 597 victims were attended of 42% of those denounced: 548 women (91.7%) and 49 men (8.3%). The age average for men was 14 (3-36) years and 17 (3-68) for women, 90% of them had sexual activity before the crime. 233 (40%) victims denounced within 72 hours (range 6-32 hours) of the rape and received HIV PP. After six months of follow-up no HIV, HBV, HCV and other STIs have been recorded. Five recurred to legal abortion.

Conclusions: A significant finding is that the majority of the victims were youth. The PP reduced the damage of sexual violence through prevention of HIV and STIs and unwanted pregnancies. We need to reinforce the program to increase the uptake of PP for victims of rape.

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MOPE0382
Knowledge and use of post-exposure prophylaxis among at-risk Boston men who have sex with men: implications for other biological prevention interventions
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Background: Understanding the factors associated with high risk men who have sex with men (MSM) knowledge and use of post-exposure prophylaxis (PEP) may be helpful as other biomedical interventions (e.g., PrEP, microbicide) become available.

Methods: A community-based sample of 227 at-risk HIV-uninfected, Boston MSM recruited by modified-responder-driven sampling completed an interviewer-administered questionnaire asking about demographics, sexual and substance use behaviors, as well as knowledge, attitudes and experience regarding current HIV prevention approaches. Logistic regression procedures examined the factors associated with PEP knowledge and use.

Results: Participants’ mean age was 41 (SD=9.1); 54% were non-white. Although 28.2% reported awareness of PEP, only 31.4% had used it. Prior PEP users did not differ from non-users demographically, but were more likely to use poppers (p=0.043), GHBP (p<0.0001), ketamine (p=0.0001), and methamphetamine (p=0.001). Men who had heard of PEP were more likely to be Caucasian (p=0.01), better educated (p=0.006), etc. and use cocaine (p=0.006) or methamphetamine (p=0.0195). Prior PEP users were more likely to have heard of PEP (p<0.0001) and those who had heard of PEP had more favorable attitudes towards PEP use (p<0.0001). Almost one-quarter of the men (24.7%) met sex partners online, and were more likely to have heard of PEP (p=0.0052) or PEP (p<0.0001), and have more favorable attitudes about PEP (p=0.0181) than those who did not meet partners online.

Conclusions: Most men who had tended to be more educated, more likely to use non-prescription drugs, and use the internet to meet sex partners. Programs to increase PEP uptake by at-risk MSM may be enhanced by educational messaging on the internet, but also need to address less educated and minority MSM. These educational strategies may transfer to PrEP if or when efficacy is demonstrated.

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MOPE0383
Microbiode prophylaxis for victims of a New York emergency Department population
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Background: The development of alternatives to condoms to decrease the rate of HIV transmission, such as microbicides, could have significant impact in high seroprevalence areas. Little is known about the acceptability of microbicide products among urban American populations who are at high risk for infection; this study sought to assess microbiode preferences among Bronx emergency department (ED) patients.

Methods: This study was a prospective study in which research assistants distributed anonymous written surveys to a convenience sample of patients and visitors in an urban level 1 trauma ED in New York City June-August, 2009. The surveys contained demographic information and questions relating to acceptability of a microbicide to prevent HIV transmission. Means and standard deviations were calculated for continuous variables and proportions for categorical variables using SPSS software. Group comparisons were made using Chi-Square and Student’s T-tests using STATA 9.

Results: Five-hundred fourteen surveys were collected. Respondents were primarily women (69.7%) and identified as either black (41.9%) or Hispanic (49.6%). Average age was 34.9 years. Most people (78.1%) said they would use some type of microbicide product. Most women (50.6%) preferred a product that would protect against both HIV and pregnancy and the preferred format for microbicide delivery was an intravaginal ring inserted once a month. Preferences were consistent between racial and ethnic groups. Most male respondents (88.3%) said they would encourage a female partner to use a microbicide. There were significant differences between age groups in terms of preferences; respondents under 40 were more likely to prefer combined microbicide and contraceptives, while those older preferred a microbicide without contraceptive.

Conclusions: Urban ED patients have positive attitudes toward using a microbicide to reduce the spread of HIV. Groups at high risk for HIV, including young people and minorities, seem to prefer a combined microbicide and contraceptive in a ring form.

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MOPE0384
Willingness to participate in a rectal microbiode trial among men who have sex with men (MSM) in Bangkok
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Background: In Thailand, high HIV prevalence has been documented among MSM. Rectal microbiodebics have been proposed for evaluation in clinical studies to determine their safety, acceptability and efficacy for HIV prevention. This study evaluates willingness of MSM in Bangkok to participate in rectal microbiode trials.

Methods: A cross-sectional sub-study of willingness to participate in rectal microbiode trials was conducted among participants in the Bangkok MSM Cohort Study, using an audio-computer-assisted self-interview. Variables with p-values <0.1 in univariate analysis were further evaluated in multivariate logistic regression to identify independent predictors of willingness to participate.

Results: During follow-up visits between February 2008 and May 2009, 1,063 MSM, (mean age, 28 years; range 19-57 years) completed the interview. Of these men, 233 (21.9%) were HIV-infected at baseline and 45 (4.2%) became HIV-infected during follow-up. Overall, 93.2% said they had ever used lubricants for anal sex, including 13.6%aseline, 4.9% baby oil and 1.0% saliva. Of all men, 56.0% said they were definitely willing to join the microbiode trial, 22.8% were probably willing, 13.9% were not sure, 5.4% were probably not willing, and 1.9% were definitely not willing. Reasons for not willing to join included not wanting a rectal exam, not wanting to have specimens collected, and not wanting to receive a placebo. In multivariate analysis, club drug use, ever sold sex, concern about HIV risk and awareness that AIDS is common among MSM were associated with willingness to participate; concern about receiving placebo was associated with unwillingness to participate.

Conclusions: Most men where definitely or probably willing to participate in rectal microbiode trials. Those with higher HIV risk and increased HIV awareness were more willing, while those with concerns about receiving a placebo were less willing. Education about HIV risk and trial concepts may help to increase trial participation.

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MOPE0385
2 for 1: developing intra-vaginal microbicide/contraceptive rings
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Issues: Combination microbicide/contraceptive products are under development. However, most current femicide trials use vaginal gel. Given the high demand for a safe, effective, female-initiated, and coitally independent product, intra-vaginal rings represent a new drug delivery system that may provide dual protection.

Description: This review discusses the development of a dual-action microbicide/contraceptive intra-vaginal ring as an alternative to first-generation dual-action microbicide gels. Intra-vaginal rings are a promising alternative to gels, as rings do not affect natural lubrication and can safely remain in place for extended periods of time (one month to one year), during which the active drugs are released from the ring. Product adherence and acceptability is expected to be greater with a ring than with a coitally dependent gel, which risks partner consent and/or awareness.

Lessons learned: Previous clinical trials of dual-action gel products such as nonoxynol-9, SAVY and BufferGel have all been ineffective in preventing HIV transmission. The review revealed that no microbicide/contraceptive ring currently exists, but pre-clinical and clinical studies show efficacy of hormonal vaginal rings, and safety of microbicide rings. For example, the approved contraceptive NuvaRing shows strong data in efficacy, stability and user acceptability. Furthermore, early clinical trials of dapivirine (an NNRTI in a vaginal ring) show that the microbicide product appropriately and safely delivers drug to the genital tract and is acceptable to women. Future studies will investigate combination ring consisting of HIV treatment drugs (antiretrovirals) and hormonal contraceptives.

Next steps: Pre-clinical and clinical studies with behavioral interview components to determine which materials and drugs will work best for the efficacy, adherence and acceptability of a dual-action ring. A successful and available product that would significantly impact women’s health and autonomy by reducing HIV infections and preventing unwanted pregnancies worldwide.

MOPE0386
Willingness to use vaginal microbicides among women living in the discordant couple setting in Pune, India
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Background: The public health impact of vaginal microbicides in preventing heterosexual transmission will be maximized only when women who are at high risk of HIV acquisition use them consistently and this consistent use will depend upon many factors. This study was initiated to evaluate the knowledge and acceptability of vaginal microbicides among women living in the discordant couple setting.

Methods: A cross-sectional study was conducted among women attending PRAYAS Amrita Clinic in Pune. Following a written informed consent women were reviewed using a structured questionnaire. Data were analyzed through descriptive and multivariate logistic regression technique.

Results: Between June 2009 and December 2009, 120 women currently living in discordant couple setting were interviewed. Their mean age was 34.4 years (range 20-60, SD 7.2). All were married. Of these 83 (69.2%) were HIV uninfected and 37 (30.8%) were HIV infected. Ninety percent of infected partners were interviewed. Baseline characteristics of three groups of participants were compared using Pearson’s Chi square test: dropped-out (any time after enrolment); intermittent attendance (missed one or more visits); and full attendance (attended all visits).

Conclusions: Knowledge of vaginal microbicides was very low. However majority of the women showed willingness to use a microbicide after informing them that research was ongoing and such products could be available in future. Advocacy and dissemination of information will help in creating awareness among Indian women for female controlled options for HIV prevention. Presenting author email: aparna.gajendragadkar@gmail.com

MOPE0387
Are women interested in a vaginal microbicides trial in Kenya?
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Background: Vaginal microbicides are a female-initiated prevention strategy that may inhibit HIV infection in women via vaginal intercourse. In order to select communities in which to conduct microbicides trials, data must first be collected regarding the interest and willingness of women to participate in such a microbicide trial as well as the overall seroprevalence and annual incidence in the community.

Methods: Women visiting 4 VCT centres in Kenya (Muru, Thika, Naivasha and Nandi Hills) provided informed consent and were then screened for eligibility for participation in the incidence study. Eligibility criteria included 18-27 years of age, not currently pregnant, not planning to become pregnant in the next 12 months, and not having had a recent sexual intercourse with a new sexual partner lasting three months. Participants were tested for HIV infection using HIV rapid tests, and HIV incidence was estimated using BED-CIAA assay.

Results: Mean ages of participants were 22 years in Thika, Naivasha and Nandi and 23 years in Meru. Across sites, most women had basic school education (64.7%) and had never been married (62.73%). In overall HIV seroprevalence was 10.7: 15.7% in Nandi, 12.1% in Thika, 10.6% in Meru and 10.2% in Naivasha. In Meru and 2.8% (95%CI: 1.4-4.2) in Naivasha. Among all of the women (97%99% across sites) reported definite interest in participating in a microbicide trial.

Conclusions: The high interest and high incidence of HIV among women at these Kenyan VCT centres, suggests a need for a female controlled prevention option, and would be ideal population for testing a female microbicide given its potential to benefit from its use.

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MOPE0388
Attendance at trial follow-up clinics in Mwanza, Tanzania during the MDP 301 clinical trial to assess the efficacy and safety of PRO 2000 microbicide gel for the prevention of HIV infection
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Background: Trial participants were asked to attend clinics every month for 52 weeks to undergo sexual behaviour interviews, pregnancy testing and clinical examinations, and receive supplies of gel and condoms. The trial population in Mwanza, Tanzania (n=1146) comprised women working in recreational facilities who were economically poor and travelled frequently for work. We investigated the frequency of clinic attendances and whether the baseline characteristics of women who consistently attended differed from those who did not.

Methods: Strategies to encourage attendance at trial clinics included providing: reimbursements for travel and loss of earnings; refreshments in the waiting area; and reminders about appointments. These strategies were reviewed regularly during meetings with participants. This analysis was restricted to women in the 0.3% PRO 2000 and placebo gel groups who did not fail pregnancy, baseline characteristics of these groups of participants were compared using Pearson’s Chi square test: dropped-out (any time after enrolment); intermittent attendance (missed one or more visits); and full attendance (attended all visits).

Results: Of 732 women included in the analysis, 14% dropped out, 45% attended intermittently and 41% attended all visits. Overall retention at 52 weeks was 82%. Age and education were associated with attendance: in the 16-24 years group, 35% attended all visits compared with 49% in the 35-44 and 46% in the 45+ groups (p=0.001), and 19% of women with secondary education completed all visits compared with 45% of women with no education (p=0.014). Participants reported that important factors for attendance, included: gel supplies, friendly staff, services, confidentiality, clinical staff and provision of refreshments.

Conclusions: A high rate of retention was achieved in a very mobile population. Attendance criteria and the trial strategy may be relevant for setting up similar interventions in other settings. Presenting author email: sheila.harvey@lshtm.ac.uk

MOPE0389
Investigating predictors of consistent gel use in the MDP 301 microbicide trial
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Background: It has been suggested for microbicide trials that increased adherence could be achieved by targeting enrolment of women with characteristics known to be associated with high adherence. Using data from the MDP 301 trial, we investigated predictors of consistent gel use in order to identify such characteristics.

Methods: Data on 6374 participants were included in the analysis, restricted to those randomised to 0.5% PRO 2000 and placebo gel arms only. Consistent gel users were defined as participants who reported using gel during the last 4 weeks correctly 7 out of 10 visits (i.e. 12 out of 13 expected visits or 100% if fewer than 13 visits attended); returned at least one used applicator to support their answer when appropriate, and attended at least 7 visits, unless they became pregnant and withdrew from follow-up. Predictors of consistent gel use were explored using logistic regression models with selected baseline variables.
Online survey to assess factors related to willingness to use microbicides among MSM in Greater Buenos Aires, Argentina

Methods: The objective of the study is to identify factors related to the acceptance of, and willingness to use preservative-free microbicides among MSM. 200 individuals with different HIV status will be surveyed through an online questionnaire designed to adjust questions to target population. A previous survey used with women was modified with data collected among MSM stakeholders. The questionnaire developed includes the following variables: demographics, recent use of HIV-risk, HIV status, condom use, use of lubricants, rectal douching, rectal products and pre and post-prophylaxis; sexual practices, HIV-related knowledge and psychological aspects (gender-roles, locus of control and attitudes towards health).

Results: The pilot study with 38 MSM determined appropriateness of the survey. The study was conducted with 21 and 62 years old and completed secondary school or higher level of education. Results revealed that 78.9% use condoms most of the times. 76.6% of them would like to use a microbicide with a condom and 20% would like to use only a microbicide next time they have intercourse. Among the participants who do not use condom usually (22.1%), most of them will use only microbicides (62.5%).

Conclusions: High level of condom use revealed an increased awareness in this population. Most participants who use condoms are willing to use microbicides as double protection. MSM who do not use condom regularly are willing to use microbicides as the only protection method. The study is in collection process and final results in a larger sample are expected by mid-year.

Safety and pharmacokinetics trial of dapivirine matrix vaginal ring

Methods: Sixteen healthy, HIV negative women aged 18-40 years enrolled at a Phase I center in Belgium were randomized 1:1 to use vaginal rings (25 mg dapivirine or placebo) for 28 days. Dapivirine concentrations in plasma and vaginal fluids were measured.

Results: Healthy, HIV negative women aged 18-40 years enrolled at a Phase I center in Belgium were randomized 1:1 to use vaginal rings (25 mg dapivirine or placebo) for 28 days. Dapivirine concentrations in plasma and vaginal fluids were measured. Safety was assessed by vaginal mucosal findings, clinical laboratory tests, vaginal pH and flora, and STIs and adverse events.

Results: Most TEsAEs were not product related and mild except for two moderate events (headache and fever). Two SAEs, reported in a single participant, were not product related. There were no clinically significant laboratory findings. Dapivirine was detectable in plasma at 1 hr post ring insertion (4-21 pg/mL), with peak levels at 5 to 14 days (232-524 pg/mL). Levels at 3 days post removal were 27-194 pg/mL. Dapivirine levels in vaginal fluids peaked at 3 to 5 days (517-4970 ng/g), with three days post removal, levels were BLQ-43 ng/g. Dapivirine was not detected in plasma or vaginal fluids at 28 days after ring removal.

Conclusions: Use of a novel 25 mg dapivirine vaginal ring for 28 days was safe in healthy, HIV negative women, and systemic absorption of dapivirine was low. Dapivirine levels in log units greater than 3 in vitro inhibitory concentrations throughout the 28-day observation period.

Preventive vaccines MOPE0392-MOPE0396

Reasons for not participating in a phase I HIV preventive vaccine study (RISVAC-02)

Results: Of 239 participants, 185/356 (52%) didn't agree to do the pre-screening: 75/185 (40%) didn't answer our e-mail or phone contact, 22/185 (12%) didn't fulfill inclusion criteria and 68/185 (36%) refused to participate (67/88 due to lack of interest (mist for the obligation to participate) and 21/88 for personal reasons (mainly arguing it was a time-consuming protocol)). The rest of volunteers (171/356 (48%) (48%) were selected for the study, 18/83 (22%) didn't fulfill criteria and 24/83 (29%) with inclusion criteria and agreed to participate, refused immediately before being vaccinated, probably afraid of being infected or side effects).

Conclusions: Only 11% of the volunteers who were interested in participate in HIV preventive vaccine study were finally recruited and 13% didn't meet inclusion criteria. Main reasons for not participating in the study were rejec trickle use with non-regular partners, fear to participate and being afraid of being infected or side effects.

How did they do it? A qualitative study of the successful recruitment and retention of female sex workers in a HIV vaccine trials network preparedness trial in Santo Domingo, Dominican Republic

Methods: Qualitative in-depth interviews using a semi-structured guide were conducted in 2006 with 24 FSW after their final follow-up visit. Data analysis included multiple readings of transcripts to identify themes, coding with ATLAS.ti qualitative software, and development of matrices to compare findings within and across participants.

Results: The most salient theme regarding retention process was that the trial was conducted in a culturally sensitive and supportive way that made women feel respected and motivated to stay enrolled. Participants appreciated that recruiters were trusted individuals who worked with the NGO that provided HIV prevention services to FSW, although not some of them had seen the recruiters, or that the vaccine unit in general, could cause them to be labeled HIV-positive. Participants appreciated the environment and high quality clinical care they received at the unit as much as the material compensation (i.e. food, transportation to the vaccine unit, ongoing communication with the trial staff, including home visits, and celebrating meaningful events (e.g. Mother's day) created a sense of community.

Conclusions: The welcoming environment of the trial, respectful treatment, and outreach beyond the trial created a sense of community that facilitated retention and overcame the potential stigma associated with participation. Future HIV-related biomedical studies with vulnerable populations should consider their local context to develop adequately appropriate recruitment and retention strategies, in particular opportunities for social integration and cohesion beyond the trial setting and ongoing support and counseling between trial visits.

Author Index

MOPE0390
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Background: In Argentina, transmission among men who have sex with men (MSM) hasn’t changed significantly its percentage between 2001-2007 (31.1% - 32.9%). New infections occur predominantly among well-educated and young men. New alternatives for HIV and STI prevention are necessary for this population. The objective of this trial was to determine willingness to use microbicides among MSM and to identify factors related to willingness to use microbicides among MSM in Greater Buenos Aires, Argentina

Methods: The objective of the study is to identify factors related to the acceptance of, and willingness to use preservative-free microbicides among MSM. 200 individuals with different HIV status will be surveyed through an online questionnaire designed to adjust questions to target population. A previous survey used with women was modified with data collected among MSM stakeholders. The questionnaire developed includes the following variables: demographics, recent use of HIV-risk, HIV status, condom use, use of lubricants, rectal douching, rectal products and pre and post-prophylaxis; sexual practices, HIV-related knowledge and psychological aspects (gender-roles, locus of control and attitudes towards health).

Results: The pilot study with 38 MSM determined appropriateness of the survey. The study was conducted with 21 and 62 years old and completed secondary school or higher level of education. Results revealed that 78.9% use condoms most of the times. 76.6% of them would like to use a microbicide with a condom and 20% would like to use only a microbicide next time they have intercourse. Among the participants who do not use condom usually (22.1%), most of them will use only microbicides (62.5%).

Conclusions: High level of condom use revealed an increased awareness in this population. Most participants who use condoms are willing to use microbicides as double protection. MSM who do not use condom regularly are willing to use microbicides as the only protection method. The study is in collection process and final results in a larger sample are expected by mid-year.

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MOPE0391
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Background: Consistent use of microbicides is required for effectiveness. Sustained-release devices such as vaginal rings may have compliance advantages over daily use dosage forms. The purpose of this trial was to determine safety and pharmacokinetics of dapivirine concentrations in plasma and vaginal fluids post removal.

Methods: Sixteen healthy, HIV negative women aged 18-40 years enrolled at a Phase I center in Belgium were randomized 1:1 to use vaginal rings (25 mg dapivirine or placebo) for 28 days. Dapivirine concentrations in plasma and vaginal fluids were measured. Safety was assessed by vaginal mucosal findings, clinical laboratory tests, vaginal pH and flora, and STIs and adverse events.

Results: Dapivirine concentrations in plasma and vaginal fluids at sequential time points over the first 24 hr after ring insertion, periodically throughout 28 days of ring use, and post ring removal. Safety was assessed by vaginal mucosal findings, clinical laboratory tests, vaginal pH and flora, and STIs and adverse events.

Results: Most TEsAEs were not product related and mild except for two moderate events (headache and fever). Two SAEs, reported in a single participant, were not product related. There were no clinically significant laboratory findings. Dapivirine was detectable in plasma at 1 hr post ring insertion (4-21 pg/mL), with peak levels at 5 to 14 days (232-524 pg/mL). Levels at 3 days post removal were 27-194 pg/mL. Dapivirine levels in vaginal fluids peaked at 3 to 5 days (517-4970 ng/g), with three days post removal, levels were BLQ-43 ng/g. Dapivirine was not detected in plasma or vaginal fluids at 28 days after ring removal.

Conclusions: Use of a novel 25 mg dapivirine vaginal ring for 28 days was safe in healthy, HIV negative women, and systemic absorption of dapivirine was low. Dapivirine levels in log units greater than 3 in vitro inhibitory concentrations throughout the 28-day observation period.

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MOPE0394
Piloting viral hepatitis B (HBV) vaccination as part of comprehensive harm reduction package in injecting drug users (IDU) and men having sex with men (MSM) in Ukraine

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Issues: WHO recommends HBV vaccination as part of comprehensive HIV prevention in concentrated epidemic. In Ukraine IDU and MSM are groups vulnerable to both HIV and HBV. According to 2006-07 research, HBsAg is found in 13.6% IDU and 9.8% MSM. Although HBV vaccination is recommended by national regulations to IDU and MSM, only newborns get systematically vaccinated, starting several years ago. Several publicly debated child deaths after regular measles vaccination built vaccination skepticism.

Description: International HIV/AIDS Alliance in Ukraine is running HIV prevention program targeting vulnerable populations with GFATM support. Comprehensive package of services is provided annually to 150000 IDU and 30000 MSM. Late 2009 Alliance with WHO consultative support developed pilot initiative on HBV vaccination as part of HIV prevention package for MSM and IDU. A model initiative was developed for NGO IDU and MSM clients. Basic vaccination in polyclinics where local AIDS centers have HIV testing facilities. Alliance procured vaccines, provided grants to 5 NGOs to manage vaccination in 4 regions based in 7 polyclinics, conducted training for multidisciplinary teams, developed motivational IEC and monitoring framework. 470 IDU and 255 MSM will get 3 doses of vaccine through March-October 2010.

Lessons learned: Medical institutions demonstrated low interest in initiating vaccination for vulnerable groups discouraged by heavy paperwork and reporting, previous vaccination scandals. Only medical institutions regularly contacting vulnerable groups and collaborating with NGOs - AIDS centres - got involved. Adding vaccination to prevention package doubled initial client coverage cost (IDU - $39 and MSM - $42) for clients who get vaccinated.

Next steps: Pilots will provide information about HBV vaccination demand in IDU and MSM, vaccination adherence, and will help correct the initial intervention model with perspective of its broader application. In future vaccination effectiveness research is planned to estimate the number of HBV cases prevented by vaccination program within harm reduction.

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MOPE0395
Expectation of volunteers towards the vaccine's efficacy from the HBV vaccine phase III trial during the un-blinding

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Background: In preparation for the final result announcement, in-depth discussion about possible results was done as part of an educational campaign. That was important to the participants' understanding of the trial result. Participants were very concerned about the meaning of the final trial result and 31.2% of them expected a negative result. During the un-blinding process, continued in-depth discussion with the participants of the efficacy results is a very important means for furthering participants' understanding of the trial result.

Methods: The study was descriptive and relates to activities during the un-blinding process of the Thai Phase III vaccine trial in Thailand (FV14A). Data were collected via open-ended questionnaire from 400 participants during 12–22 October 2009.

Results: Out of 400 participants who came for unblinding visits, 212 (53%) were vaccinated and 188 (47%) were placebo recipients. Mean age was 29.53 years (SD: 6.37). Among the 400 participants, 298 (74.5%) were expected to receive the vaccine. Participants’ expectation towards the vaccine’s efficacy was 31.2% and 32.08% were acquiescent. In contrast, the placebo group (85.11%) were acquiescent. 10.11% of those who received placebo thought that receiving the vaccine would be better than the placebo. Only 12.2% agreed to participate.

Conclusions: The expectation of the vaccine’s efficacy in the placebo group was significantly higher than that of the vaccine group (10.11% vs 2.2%). Among the participants who were vaccinees and 188 (47%) were placebo recipients. Mean age was 29.53 years (SD: 6.37). Among the 400 participants, 298 (74.5%) were expected to receive the vaccine. Participants’ expectation towards the vaccine’s efficacy was 31.2% and 32.08% were acquiescent. 10.11% of those who received placebo thought that receiving the vaccine would be better than the placebo. Only 12.2% agreed to participate.

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MOPE0396
Communication of HIV vaccine trial results: local experiences from HIV vaccine phase III trial in Thailand

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Issues: The world’s largest HIV vaccine trial was conducted in Thailand from 2001–2006. It was the largest Phase III trial ever, enrolling over 16,000 volunteers. The trial was stopped prematurely in 2006 due to an unexpectedly low efficacy. This study aims to provide insights into the communication of the trial results, which were announced in December 2009.

Background: The MOPH jointly decided to announce the final analysis result in Thailand fi rst. The final analysis Communication Plan to be implemented in September 2009. A consensus communication dossier was drafted, containing statements, key messages and frequently-asked questions for each collaborator. The MOPH was responsible for communication within Thailand and the Sponsor was responsible for the international media. Four scenarios were possible result agreed to and communication materials were drafted accordingly: (1) vaccine efficacy >50%, (2) vaccine efficacy 30-50%, (3) no effect on acquisition but viral load effect; and (4) no effect on acquisition or viral load.

Lessons learned: The communication plan was scheduled 3-5 weeks prior to the announcement. The final analysis result was kept conﬁ dential until the announcement day. Only selected key opinion leaders and media were informed within 24-48 hours prior to the day of announcement. The simultaneous teleconference and nation-wide television broadcasting were conducted to reach volunteers and community representatives as quickly and completely as possible. Shortly thereafter volunteers were contacted individually to come back for the un-blinding and see the result.

Next steps: The Thai community is still looking forward to further development of efficacious HIV vaccine. The advocacy for further vaccine development should include both scientiﬁ c and public communities. The Thai community will maintain her partnership on HIV vaccine development until a licensed HIV vaccine is available.

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MOPE0398
Antiretroviral therapy to prevent the sexual transmission of HIV-1 and reduce HIV-1 associated morbidity and mortality: baseline data from HPTN 052
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Description:
The late 1990s and early 2000’s were likely the worst periods in the history of HIV/AIDS in Botswana. Prevalence among adults aged 25-40 years was above 30 percent. The number of AIDS orphans increased rapidly. Less than 5 percent of the ARV-eligible population was enrolled on the national ART programme. Hospital beds were largely occupied by patients with HIV-related illnesses. Life expectancy at birth had declined by 13 years, between 1990 and 2003. Severe shortage of skilled manpower to address HIV/AIDS complications and challenges.
Description: The African Comprehensive HIV/AIDS Partnerships (ACHAP), a Public Private Partnership (PPP) between the Government of Botswana, the Bill and Melinda Gates Foundation, Merck Co. Inc/the Merck Foundation was set up in 2000, with a budget of US$100 million to enhance and support Botswana’s ARV programme to have an impact on the HIV/AIDS deaths[]. Thirty five infectious disease care clinics were constructed and over 7,000 health care workers were trained in strengthening the health system through HIV/AIDS support. By October 2009 122,733 patients were on treatment in the national programme out of 141,370 (67.4%) of ARV-eligible patients on treatment in the country.
Lessons learned: ACHAP demonstrates how PPPs can make a meaningful and lasting contribution to public health challenges, helping to restore hope and transform national programmes. Success depends on building local capacity and ensuring buy-in at all levels.
Next steps: Going forward, ACHAP will progressively transition its support on ART to the Government to enable sustainability of the national treatment programme, while increased support is required for prevention interventions to help the country to achieve its highly ambitious goal of “Zero new infections by 2015”.

MOPE0400
Paediatric ART roll-out and scale-up - an Indian experience
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Issues: Until 2006, HIV screening for children and registration of children for HIV care services in India was very low. Since paediatric ART formulations and drugs were not available to the Indian population, a positive HIV-test result for children seemed like the end of the road. This inhibited parents from testing their children. Nationally, the extent of prevalence among children could not then be calculated.
Description: By the third quarter of 2006, only 1400 children were accessing first-line ART in India. With the intervention of Clinton Foundation’s HIV/AIDS Initiative (CHAI) in 2006, paediatric ART drugs were supplied across all ART centres by NACO. This was coupled with a pipelining fixed-dose combination (FDC) drugs being made available for children under the National AIDS Control Organisation’s country-wide programme. The overall efforts to reach out to HIV-infected children for appropriate care and treatment services were supported by family-boosting drives undertaken by CHAI across the country. By the third quarter of 2007, i.e. a year later, the number of children first-line ART had reached 7500, which is more than a four-fold increase. This also indicated an overall decline in the stigma and discrimination for HIV.
Lessons learned:
(1) Institutional care for children can be strengthened and access to care improved if this is backed by improved ART formulations and drugs.
(2) Family-screening is very effective in reaching out to children for care and treatment services.
(3) Provision of care services can contribute to breaking barriers in stigma and discrimination.
Next steps:
(1) HIV care for children should be made part of routine health services. This should start at the primary health care centres.
(2) Linkages between primary health care centres meting out general health services and ART centres should be strengthened to ensure better follow-up of patients.
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MOPE0401
HIV-positive men who have sex with men reporting a high frequency of sex and unprotected insertive anal intercourse are independently associated with high rates of HIV resistance in Vancouver, Canada
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Description: HIV+ MSM who “top” reported high rates of UIAI, which was associated with high frequency sex and high rates of HIV resistance. Targeted prevention is indicated to reduce the risk for transmission of drug-resistant HIV.

Next steps:
(1) HIV care for children should be made part of routine health services. This should start at the primary health care centres.
(2) Linkages between primary health care centres meting out general health services and ART centres should be strengthened to ensure better follow-up of patients.
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Approaches to counselling and testing in youth and adults

MOPE0402
Results from a multimedia testing and counseling program in a New York City Emergency Department

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Objective: The US Centers for Disease Control recommends routine HIV screening in emergency departments (EDs). This study evaluates a novel approach to counseling and testing in a high-volume ED which utilizes an HIV counselor and a multimedia tool for conveying HIV information and electronically collecting risk factor data. We evaluated this program to assess demographics and risk factor characteristics, provider-reported satisfaction and outcomes for positive patients.

Methods: This prospective cross-sectional evaluation was conducted for 2 years at an inner-city, level 1 trauma hospital municipal. A convenience sample of patients were recruited from HIV counselors. Previously validated videos for HIV pre- and post-testing counseling were used. Demographics, risk factors, and satisfaction information were collected using patient self-reporting on the touch screen computer. Chart reviews were conducted by the HIV-positive patients’ medical provider. Data were analyzed using SPSS.

Results: 28,695 patients were tested for HIV. Demographics: 41.9% male, mean age 36.0 ± 14.2 years, 54.7% Hispanic, and 32.2% African-American. Risk factors were: 6.4% MSM, 31.0% had multiple sex partners in the past 3 months, 49.8% reported condom use as “never”, 1.5% used inject- ion drugs. Patient satisfaction was high: 88.8% reported learning a moderate amount of new information about HIV. However, there were 78.6% preferred the video-and-counselor format. 101 patients tested HIV-positive and 86% were linked to medical care; mean days to first medical visit was 7 days. Positive patient outcomes: 85% of eligible patients began HAART, median days to HAART treatment was 35, 62% of patients on HAART had viral load less than 400 copies/mL.

Conclusion: A rapid HIV testing and counseling program which uses a multimedia tool and a counselor in a busy ED can effectively test a large number of patients, provide consistent prevention messages to patients and link a large percentage of newly diagnosed HIV-positive individuals to comprehensive medical care. Presenting author email: ycail133@yahoo.com

MOPE0403
Integrating HIV counselling and testing into life and ritual to reach men in Swaziland

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Issues: In Swaziland, uptake of HIV counselling and testing (CT) among men remains low. In 2007, only 8% of individuals who were newly diagnosed positive, women were more likely than men to have been previously tested (71% vs 56%), indicating that men had less experience with HIV testing than women.

Description: In January 2009, PSI launched mobile CT services at dip-tanks where men bring cattle to be fumigated. A mapping exercise was conducted in Hhohho region to identify dip-tank locations and estimate the number of men accessing these sites. PSI employees, community organizations and IPC agents conducted education and mobilization with local leaders, health personnel and veterinary assistants to ensure buy-in and integration of services. To raise awareness among men in the chiefdoms, PSI counsellors facilitated community meetings integrated into sidi inihloka ceremonies - the ritual cooking and eating of a cow’s head. Other activities implemented at dip-tanks included small group discussions on HIV prevention, HIV-themed dramas, health talks and CT. In 11 months, 94 dip-tanks in the region were visited, reaching 9,167 and testing 3,246 men (35% of these, 632 (19%) were HIV-positive).

Lessons learned: Integrating CT into life and rituals was a successful means of increasing uptake of CT among men. Considering that men use the same dip-tank on a regular basis, this strategy can be used to provide ongoing risk reduction counselling for HIV-negative men and help track referrals for post-test care services.

Next steps: Future activities will include training peer educators for community-based HIV prevention education. Increased focus will be place on risk reduction education and promotion. A mapping exercise has been launched to expand this strategy nationwide. Conceptual work will be distributed by IPC agents to encourage men who are not farmers to visit the dip-tanks.

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MOPE0404
How to maximize uptake of HIV testing in prisons

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Issues: South African prisons provide voluntary HIV counseling and testing (CT) for inmates from prison clinics. Uptake is poor because of staff shortages and limited availability of CT. Most prisoners are men; in the non-incarcerated population 43% of men versus 57% of women aged ≥15 years report ever being tested for HIV.

Description: In 2008, the South African Department of Correctional Services invited New Start, South Africa’s largest non-governmental testing service, to offer CT and TB and STI screening inside prisons. New Start aims to reach men and other underserved populations, and provides a mobile CT service. Prisons advertised, through New Start posters, the days when New Start would provide CT services. Trained New Start staff brought everything needed to provide CT, including tests to be used as private counselling and testing areas. From October 2008-September 2009, New Start worked with 67 prisons, counselled and tested 25,392 inmates (97% male, 16% tested HIV-positive) and referred 3,695 inmates for clinical follow-up for HIV, TB and STI.

Lessons learned: An external CT service provider makes it logistically easier for prisons to test inmates. Prison staff were willing to undertake CT service on designated CT days. Counselors were not well prepared to deal with men who have sex with men (MSM) issues common among inmates. Prisons are an excellent venue for CT service providers who want to reach men.

Next steps: To maximize acceptance of HIV CT, prison clinics should focus on offering provider-initiated CT to all patients and should invite external CT service providers to reach those inmates who do not go to prison clinics. Counselors should receive a short training on prison-specific MSM issues.

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MOPE0405
HIV testing among female sex workers in China

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Background: Heterosexual transmission has become the dominant mode of transmission in China’s escalating AIDS epidemic. The millions of female sex workers (FSWs) and their clients play a critical role in the sexual trans- mission of HIV virus. However, most FSWs have been under-detected and there is limited data on the high-risk FSWs in China.

Methods: A total of 1,022 FSWs were recruited through community outreach from entertainment establishments in two cities of Southwest China. They completed a self-administered cross-sectional survey measuring demographic- s, HIV/STI-related perceptions and behaviors including HIV testing.

Results: About 48% (n=486) of FSWs had ever been tested for HIV; and only 63% of these women knew their test result, and 37% knew their partner's test results or didn't obtain results from the testing clinics. The reasons for not testing for HIV or didn't obtain test results included low perceived risks (70%), don't know where to do testing (47%), no time (41%), no intention to know anything about AIDS (35%), fear of needles/syringes (38%), fear of testing results (24%), and fear of stigma toward FSW (28%). FSWs who never had HIV testing were significantly less likely to use condoms consistently with their clients and stable partners (p<.01).

Conclusions: Only less than half of FSWs received HIV testing. Perceived lower risks of HIV infection, lack of information on where to do the testing, and fear of stigma are main reasons for not accessing to testing. Culturally appropriate interventions are urgently needed to promote HIV testing among FSWs in China.

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MOPE0406
Promoting partner testing as a key component of the prevention of mother-to-child transmission of HIV (PMTCT)

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Issues: Lesotho has the 3rd highest HIV prevalence in the world, averaging 23.2% in the general adult population 15-49 years, and 25.7% among antenatal care attendees in 2007. With the introduction of provider initiated testing in 2007 at sites supported by the Elizabeth Glaser Pediatric AIDS Foundation, over 95% of women attending ANC knew their status during pregnancy. Male partner testing has remained a huge challenge averaging 10% at ANC due to cultural barriers and migration. Our goal was to increase male partner testing in one clinic then translate those findings to the rest of the country.

Description: In January 2008, with the support of EGPAC, nurses at Mahaltsa Clinic introduced routine testing for ANC attendees and couple consultations at the first antenatal visit. During this visit, all ANC clients and their male partners were offered HIV testing. Women who did not come with their husbands were identified and a trained community HIV counselor was sent to their home to offer the test and counseling to the male partner and results were confidentially transferred to clinic.

Lessons learned: Data from January to December 2008 showed an overall partner testing rate of 67.6% (117/173) at Mahaltsa Clinic compared to less than 10% in the previous years. Mahaltsa reported a partner testing rate of 20.8% (36/173) and 14.5% (17/117) among male partners. Overall, 9.4% (11/117) of couples were discordant; with the woman positive and the man negative in 82% (9/11) of the discordant couples. Couples counselled in ANC and community HIV testing can lead to high rates of partner testing.

This has improved the overall family-centered nature of HIV care/treatment and allowed the introduction of preventive measures such as condom use, psychosocial support to care/support disclosure for discordant couples to keep the negative partner HIV-free.

Next steps: This success can be replicated in other resource limited set-tings.

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MOPE0407
Door-to-door HIV counseling and testing (HTC) as a recruitment strategy for 052 HIV discordant couples study at UNC project, Lilongwe, Malawi

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Background: Door-To-Door is a community based HTC approach adopted by the Malawi Ministry of Health in 2007 to increase the uptake of HTC. UNC Project started door to door HTC in May 2008 to increase the uptake of couples accessing the test in order to identify HIV discordant couples for recruitment into HPTN 052, a multi-site study designed to determine if antiretroviral therapy can reduce transmission of HIV. UNC Project will enroll 250 discordant couples.

Methods: We identified at-risk, underserved areas through community involvement. We educated chiefs of the areas on HIV and AIDS including HIV serodiscordance. We mapped the areas to determine the workforce required while the chief was responsible for informing the area of the event. On the agreed date, the door to door team comprising of VCT and Nurse Counselors met the chief and there after commenced the testing. Individual and couple counseling and testing were conducted at a place convenient to the client using standard rapid HIV tests. All testing data was recorded in standard MoH HTC registers.

Results: Difficulties were encountered in the home-based HIV testing arm with respect to including early morning-6:00am and post-work hours-7:30pm, 2) HIV testing was offered on weekends accounted for an additional 42% of all testing and similar increases were seen among school aged children.

Lessons learned: We describe 3 key adaptations to home-based HIV VCT that emerged as part of a randomized controlled trial of home-based VCT versus TB clinic-based HIV VCT intervention for households with a member of 350 TB evaluation patients in Kampala, Uganda. During the course of the randomized trial difficulties were encountered in the home-based HIV testing arm with respect to engaging adult males and school aged children in HIV counseling and testing. Discussions between household members and study revealed that key adaptations need to travel or be at work for adult males confined to the study/program testing hours (8am-5pm). Likewise timing conflicts for school children in both day schools and boarding schools made many children unavailable.

Methods: Home-based HIV testing were adapted/modeled in 3 ways to accommodate these timing conflicts: 1) HIV testing hours were expanded to include early morning-6:00am and post-work hours-7:30pm, 2) HIV testing was offered on weekends, 3) the use of mobile phone calls to confirm appointments made with the fisherfolk.

Lessons learned: These three key adaptations resulted in a sustained increase in the proportion of working men engaging in home-based HIV VCT (weekends accounted for an additional 42% of all testing) and similar increases were seen among school aged children, especially those in boarding school.

Results: The use of mobile phone calls to confirm HBVs was not used to home visiting significantly cut down on un-productive staff fieldwork time.

Next steps: We recommend including these three key adaptations into existing or planned home-based programs for engaging persons in HIV testing and care.

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MOPE0408
What works in HIV testing for women

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Issues: Women need more access to comprehensive HIV testing services, both within and outside of antenatal care settings. The emphasis on counseling and testing for prevention of perinatal transmission (PPT) means that nonpregnant women are not being reached with VCT services and few HIV testing programs that are not part of PPT services are designed to meet the needs of women.

Description: What Works: Evidence for HIV/AIDS Interventions for Women and Girls, produced by OSI and PAF, provides a comprehensive review of evidence from 2001 to 2009 on women and HIV. Nearly 2,000 peer-reviewed articles from 89 countries were consulted on all aspects of women and HIV prevention, care, treatment, and care to determine effective intervention strategies. Evidence has clearly been shown to work for women and girls.

Lessons learned: What Works documents the evidence for strategies that successfully increase testing, particularly among women. These strategies include: 1) multi-media interventions, community outreach and mobilization, home testing, availability of treatment, integrating VCT with other health services and encouraging couple dialogue. The research also identifies a number of gaps in the evidence evaluation about whether provided or opt-out testing discourages people from accessing health services.

Next steps: The evidence for these interventions will be widely disseminated to country programs (including governments and civil society) and donor organizations. A web-based version will facilitate access to the evidence in advocating for and designing programs to expand HIV testing efforts for all.

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MOPE0409
Availing HIV counseling and testing to hard-to-reach most-at-risk communities: the case of fisherfolk in East Central Uganda

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Issues: According to the Lake Victoria Fisheries Organization, HIV prevalence in fisher communities in Uganda may be as high as 49%. Fishing communities are characterized by significant transactional sex interaction; a low risk perception compared to general population and a high proportion of migrant populations - all factors that increase their risk for HIV infection. Additionally, their unique work and rest patterns make fisherfolk difficult to target with interventions.

Description: In 2008, Uganda HIV/AIDS Services Project, a JSI managed program in Uganda, with funding from USAID, awarded a one-year grant to FLEP to deliver HIV counseling and testing (HTC) services among fishing communities in East Central Uganda. Through Beach Management Units, 54 post-test couples were referred from these communities to participate in couple dialogue sessions and provide personal testimonies. These couples were further utilized to identify other couples who had not received HTC services. Mobile laboratory field teams were invited to provide HTC services at times appropriate for couple service provision. Within a period of nine months, 2,581 couples were tested; 23 couples were concordant positive and 40 were discordant.

Lessons learned: Personal testimonies shared by post-test couples are effective in raising awareness about HIV risk perceptions among couples and ultimately promoting prevention through abstinence, faithfulness or consistent condom utilization. To play this role, post-test members need to be trained and equipped with information, Education and Communication materials. A field mobile HTC team is necessary so as to quickly respond to appointments made with the fisherfolk.

Next steps: HIV/AIDS programs need to tailor their interventions to suit the daily routines of target populations like the fisherfolk. Village health teams need to be trained in supporting referrals and demand creation for services. HTC outcomes by mobile teams should be integrated with other HIV/AIDS services.

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MOPE0410
Key adaptations for home-based HIV testing to reach men and school children: lessons learned in Uganda

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Issues: Home-based HIV voluntary counseling and testing (VCT) and delivery of HIV care and treatment have been shown to be effective strategies for engaging HIV-infected persons into care. However, these innovations have been reported to have difficulty in reaching working men and school children.

Description: We describe 3 key adaptations to home-based HIV VCT that emerged as part of a randomized controlled trial of home-based VCT versus TB clinic-based HIV VCT intervention for households with a member of 350 TB evaluation patients in Kampala, Uganda. During the course of the randomized trial difficulties were encountered in the home-based HIV testing arm with respect to engaging adult males and school aged children in HIV counseling and testing.

Lessons learned: These three key adaptations resulted in a sustained increase in the proportion of working men engaging in home-based HIV VCT (weekends accounted for an additional 42% of all testing) and similar increases were seen among school aged children, especially those in boarding school.

Methods: Home-based HIV testing were adapted/modeled in 3 ways to accommodate these timing conflicts: 1) HIV testing hours were expanded to include early morning-6:00am and post-work hours-7:30pm, 2) HIV testing was offered on weekends, 3) the use of mobile phone calls to confirm appointments made with the fisherfolk.

Lessons learned: These three key adaptations resulted in a sustained increase in the proportion of working men engaging in home-based HIV VCT (weekends accounted for an additional 42% of all testing) and similar increases were seen among school aged children, especially those in boarding school.

Results: The use of mobile phone calls to confirm HBVs was not used to home visiting significantly cut down on un-productive staff fieldwork time.

Next steps: We recommend including these three key adaptations into existing or planned home-based programs for engaging persons in HIV testing and care.

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MOPE0411
Results from a rapid HIV testing and counseling program in a New York City pharmacy

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Background: The New York City Department of Health developed an aggressive HIV testing initiative to address the disproportionate number of Bronx residents diagnosed concurrently with AIDS at the time of HIV testing and the estimated 250,000 Bronx residents aged 18 to 64 who have never been tested for HIV. This study seeks to determine if introducing rapid HIV testing into a routine pharmacy care model is efficacious, in terms of expanding this initiative to a non-conventional community setting in a high prevalence area of the Bronx.

Methods: A prospective study was conducted on a convenience sample of customers at a community pharmacy from 10/26/09-1/29/10. Demographic, sexual history and HIV risk factors were documented. Patients were offered, identified HIV infections and patient satisfaction were evaluated to assess the acceptability of this testing model. Data were analyzed using SPSS software.

Results: In 41 days of testing, 584 patients were approached. Of the 380 eligible participants, 284 (73%) agreed to test while at work, 130 (34%) were unable to test because of prior HIV testing within one year. Demographics: 41.3% male, 64% Hispanic, 30% black. Median age was 36.6 years (IQR 16.3). Patients reported significant risk factors for HIV: 11.2% were MSM, 35.2%
MOP0412 Knowledge and perceptions on couples HIV counseling and testing among health workers working at the AMPATH HIV comprehensive care clinics in Eldoret, Kenya

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Background: HIV/AIDS remains a major Public Health and developmental problem in Kenya. In the past decade, the transmission of HIV among couples has steadily increased, thus the relevance of Couples HIV Counseling and Testing (CHCT). Results: Among the 10 Key informant interviews done in a cross sectional survey, Results: Most Comprehensive Care clinic (CCC) health workers know that CHCT includes providing HIV counseling and testing to sexual partners to guide them to a CCC health worker and access CHCT. CCC health workers had minimal information regarding advantages of CHCT, a major challenge in advocacy and promotion to the strategy. Various negative perceptions towards CHCT were identified among health workers. This could affect handling of CHCT clients while seeking CCC services. Stigma and fear were identified as major barriers to CHCT.

Conclusions: There is a low level of knowledge on CHCT by health workers which hinders their capacity during both advocacy and providing care related to CHCT. There is need to train CCC health workers in CHCT and that a national wide strategy that integrates CHCT into other health care systems is of necessity.

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MOP0413 Scaling up HIV counseling, testing and care services through community camping; an innovation for rural populations in Uganda

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Issues: In Uganda, less than 15% of the population has ever had an HIV test. HIV/AIDS services are largely concentrated in urban-based health units thus creating overwhelming demand by the rural communities. Community testing increases access and utilization of HIV services by mobile and hard to reach communities and, avoids costs incurred by community members in search of HIV testing services. With Financial support from UPHOLD, MMHF an indigenous organization established in 2004 offers a variety of community health services including HCT outreaches at both static and mobile sites, home-based HCT and, comprehensive HIV services through community camping (CC).

Description: Adopted in 2007, CC innovation is a strategy where-by Integrated trained counselors (ITCs) go into and live in the rural communities for some days, providing HCT, care and support services with the intention of reaching the would be left out (mobile persons) and, understanding the barriers to testing including norms, values and practices. A team of ITCs is received by community volunteer counselors (COCs) who do community mobilization assisted by local leaders. ITCs provide house to house HCT and care to all eligible persons and to those with potential risks of HIV acquisition. Depending on the test outcome, appropriate referral for HIV prevention, care and psycho social support is made.

Lessons learned: From February 2007 to date, 120 camp visits have been done, a total of 54,073 tested and given results, 934 newly identified HIV + given basic care package and referred for further care and support. The CC strategy bridges access and utilization gaps. It is an avenue for delivering comprehensive services to the poor, hard to reach and mobile populations.

Next steps: With less than 15% of Ugandans tested for HIV, therefore the HIV/AIDS players need to scale up HCT innovations CC among others expanding access and utilizing HIV/AIDS services.

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MOP0414 Acceptance of home-based HIV counselling and testing in a rural district in South Africa

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Background: Various social, structural, and economic barriers hinder optimal utilization of facility-based voluntary HIV counselling and testing services. Thus, over 90% of those who are HIV-infected remain unaware of their status. To overcome these challenges, there is growing interest in alternative, community-based models such as home-based voluntary counselling and testing (HBVCT).

Methods: As part of a community randomized controlled trial to compare door-to-door home-based testing versus facility-based VCT, we are implementing a HBVCT intervention in a rural district of KwaZulu Natal, South Africa. Eleven lay counsellors in 8 community clusters are offering HBVCT using rapid HIV test kits. As the trial is not yet complete, we report preliminary results of uptake based on process data gathered from routine monitoring and evaluation.

Results: In the first 4.5 months of implementation, lay counsellors visited 1,119 households and tested 1,535 people, approximately 75% of those approached. Of these, 38% were first time testers, and 12% were HIV-positive. The majority of testers were women (75%). Only 4% of female testers were pregnant. The mean age of testers was 41.5 years (range: 14 - 96 years) and this differed minimally between males and females. Eighty-two couples received couples counselling and testing; seven were discordant, while 5 were discordant positive.

Conclusion: Preliminary results suggest that acceptance of HBVCT in a rural area of South Africa is high and consistent with similar evidence from countries such as Zambia and Uganda. This indicates that HBVCT may be appropriate for scale up in rural settings such as this. However, this effort would necessitate greater attention to reaching certain client groups and strengthening linkages to the existing health care infrastructure.

MOP0415 Integrated camps for HIV-related risk reduction and HIV counseling and testing among young people in post-conflict Northern Uganda

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Issues: Of the HIV-infected global population, about half became infected between the ages of 15 and 24 years. Attention is increasingly turning towards young people, who are not yet sexually active or who are just beginning on their sexual lives. Sexual debut at young age puts a person at great risk of contracting HIV infection. In northern Uganda one fifth of young people have had sex before the age of 15 years. Additionally, only 20% of the youth in northern Uganda have comprehensive knowledge of HIV transmission and ways of preventing it.

Description: The Uganda Malaria, AIDS and Tuberculosis (NUMAT) program is using media campaigns, peers counseling, life skills training, and other tailored interventions to reach youth with HIV prevention messages. Specifically, the strategy to reach young people through media campaigns was employed in this intervention, where HCT camps were offered to youth. Using games, sports, and video shows combined with a package of prevention messages including HIV counseling and testing (HCT). The aim is at integrating dissemination of HIV risk reduction messages with awareness of HIV sero-status.

Lessons learned: In 2009, 16 youth camps run by peer educators and master trainers were conducted, with a total of 3,200 young people (1,952 boys and 1,248 girls). Thirty-five percent of participants were either married or separated and 2% attended with their partners. During the 12 camps where HCT was offered, 417 youth (141 M, 276 F) were tested for HIV and 16 tested HIV-positive (3.8%). This is consistent with the regional figure of 3.7% found for the same age group in a countrywide survey.

Next steps: Targeting youth is vital for HIV prevention programs. Designing interventions that couple open dialogue, peer support and educational messages with HCT can be very effective. However, there is need to involve parents in the camps’ organization and to encourage participation of girls as well to make this approach more successful.

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MOP0416 Enhancing health security in sexual unions through HIV counseling and testing and addressing long-term monogamous relationships in Northern Uganda

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Issues: The HIV epidemic is a dynamic one whose changing epidemiological pattern needs to be understood in the quest of more effective prevention approaches. Having concurrent sexual relationships is an important driver in HIV transmission. In Uganda, a country with generalized HIV epidemic, the contribution of concurrent sexual partnerships to HIV prevalence at 6.4%, recent evidence indicated that 43% of new infections occur among people in monogamous relationships. There is a growing need for HIV prevention strategies - including HIV counseling and testing (HCT) - to address couples as a unit of behavior change.
MOPE0417

The impact of VCT services on HIV-related high-risk behaviors among men who have sex with men (MSM) in Hebei province, China

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Abstract: The effect of voluntary counseling and testing (VCT) services on high-risk behaviors among MSM is unknown and little researched in most places of China. This study was designed to estimate the impact of VCT intervention services on the characteristics of high-risk behaviors and behavioral changes among MSM in Langfang City, China.

Methods: Three hundred and thirty-three MSM were recruited from the internet and gay bars between September to November, 2007, to participate in VCT intervention services in Langfang City. Three-month follow-up. Face-to-face interviews at pre-VCT baseline and post-VCT 3-month follow-up were conducted for data collection.

Results: The prevalence of HIV, syphilis, gonorrhea and condyloma acuminatum were 6.7%, 21.0%, 14.8% and 5.6% respectively. Multivariate logistic regression models showed that inconsistent condom use (OR=1.53, 95% CI: 1.102-2.132, P=0.034) and being of the opposite sex (OR=9.697, 95% CI: 2.203-45.104, P<0.003) are risk factors for HIV infection, while group sex (OR=5.886, 95% CI: 2.250-15.395, P<0.001) is a risk factor for syphilis infection. At 3-month follow-up, the number of multiple partners, one-night stands, anal sex and bleeding/mucosal scratches after sex dropped significantly. Among STD-positive MSM, anal intercourse activity was reduced from 73% to 38%, and group sex and bleeding during intercourse decreased from 19.2% and 23.1% to 5.8% and 5.9% respectively. Among STD-negative MSM, the frequency of one-night stands fell from 32.5% to 17.2%, but group sex rose from 57% to 78.5%. STD-negative MSM were less likely to engage in anal sex compared to STD-negative MSM (χ2=5.189, P=0.023).

Conclusions: These data suggest that VCT services are able to reduce high-risk behavior among MSM, and therefore may be a valuable intervention tool for HIV and other sexually transmitted diseases (STDs) were also found.

MOPE0418

Home-based HIV counseling and testing in a rural community in South Africa: an intervention reaching more women than men

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Background: The low uptake of facility-based VCT in South Africa, particularly amongst high risk groups has hindered attempts to increase access to effective treatment and prevention strategies. Many barriers to HIV testing have been described and these include lack of transport, fear of stigma, and health system factors such as stock outs of HIV test kits. This study is a community intervention aiming to provide home based VCT in a rural community in KwaZulu-Natal, South Africa. Eleven Lay counselors have been employed to conduct home-based VCT testing in households.

Methods: In the 4.5 months since the intervention was implemented, a total of 3287 people have been approached, 1499 women and 1788 men with 75% (1532/2046) accepting a test. Of the total number tested, 75% were women. More males (35%) compared to females (23%) refused to test (RR 1.48, 95% CI: 1.31-1.67). A number of reasons for test refusal were reported, including being scared to know status, status already known, client on ARVs, fear of stigma, wanting to seek permission from someone else, and clients not believing that they have HIV or are at risk of getting it. There was a significant difference in the proportions of men (16%) compared to women (27%) refusing to test as they reported that they already knew their HIV status.

Conclusions: Overall, acceptance of home-based VCT in this rural district was encouraging. However, the intervention team reported that women were more often shown than men. Men constituted only 28% of those approached and also showed a higher refusal rate. This report will discuss on going research on why fewer men were reached and why they are more likely to refuse. Mobilization strategies specifically targeting men and who are scared to test may be needed.

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MOPE0419

HIV testing and counseling in rural health centres: The first step towards expanded access to PMTCT interventions

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Background: HTC in the public sector is provided by Health surveillance assistants (HSAs). These are community based and rarely in the counselling room. Despite scaling up HTC programs in Lilongwe district in Malawi, only 25% of the pregnant women knew they HIV status by delivery time in 2006 and PMTCT programs were mainly implemented in the urban areas. To address the gap, Lighthouse designed a program to increase access of HIV testing and counselling among pregnant women in rural health centers.

Methods: 60 lay persons (with 33% females) were recruited and attended a three-week national HTC training. Successful candidates were then deployed to 29 rural health centers under the districts health office (DHO) to provide counseling and testing in the current HTC programs. Couples who group pre test education (GPT6) to ANC attendees on clinic days followed by one on one counselling sessions. AMC nurses had a chance to opt out during this stage. The general population was also tested. Monthly site supervisors and report writing were done by HTC supervisors in all rural health centers.

Results: Between September 2008 and September 2009, a total of 102,568 clients were tested. Of which 43,802 (43%) were pregnant women of which 1,201 (3%) were HIV-positive and were consequently referred for PMTCT intervention. The total number of pregnant women receiving HTC in Lilongwe doubled compared to 2007.

Conclusions: This project has proved very effective as more women have now been able to access HTC services, which is an entry point for PMTCT interventions. This is also first step for potential task shifting of PMTCT related activities like infant feeding counselling from medical personnel to lay counselors.

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MOPE0420

Home-based HIV testing and counseling: an innovative strategy for reducing the HIV testing gap

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Issues: According to the Kenya AIDS Indicator Survey 2007, only 34% of all adults (15-64 years) have tested for HIV. To achieve the roll of universal access to HIV services, innovative HIV testing and counseling approaches are urgently needed.

Description: To reduce the HIV testing gap, APPHA II Western project implemented a home-based HIV testing and counseling program (HBTCP) in four districts (Bungoma South, Butere, Hamişi and Kakamega central) in Western province, Kenya, between April and December 2009. Consultative and joint planning meetings were held with the health management and key stakeholders. Community mobilization was conducted through local radio, leaflets and community meetings. Community mapping conducted for target districts identified 22,456 households with 112,948 eligible persons. Orphans and vulnerable children were identified through children’s clubs and community based organizations. District teams were formed comprising HIV counselors, laboratory supervisors, District AIDS Coordinator, community health workers and village elders and oriented to the home-based HIV testing approach. Of the eligible population, 105,859 (93%) clients were tested, of whom, 46% were male and 53% were female. HIV sero-positive rate was 4.3%. Intensified tracking of HIV-positive clients from the location revealed that 57% of those referred attended HIV care and treatment services.

Lessons learned: Acceptability of HBTCP was very high in Western province. HBTCP is an effective approach for reaching persons, especially men and couples, who may not come into contact with the health system. Achieving the community was crucial for the success of the program.

Next steps: Plans are underway to review the cost implications of the program and discuss challenges of strengthening linkages to HIV care and treatment. The Kenya Ministry of Health plans to review the potential for using this strategy to reach persons in densely populated regions with high prevalence rates.

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MOPE0421
VCT soccer tournaments: linking sport, prevention, testing and treatment
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Issues: Across southern Africa, women and adults access voluntary counseling and testing (VCT) at higher rates than men and young adults. Among young people aged 15-24 years in Zambia, only 24 percent of females and 15.5 percent of males have ever tested for HIV. The need for increased testing uptake is urgent, as studies suggest that a majority of those living with HIV do not know their status and those accessing care and treatment do so at a late stage. Stigma and fear greatly inhibit testing, particularly among men.

Description: A model developed by Grassroot Soccer (GRS) in South Africa, Kenya and Zambia, VCT soccer tournaments use the familiar, engaging atmosphere of sport to increase uptake of VCT services and de-stigmatize HIV testing. The tournaments integrate educational sessions, VCT, and referrals for those testing positive. Since 2006, approximately 6,890 individuals have been tested at 21 VCT soccer tournaments in South Africa, Lesotho, Zambia, Malawi, and Namibia. At these events, 353 individuals tested positive (5.1 percent) and were immediately referred to a care and treatment partner.

Lessons learned: Approximately 53 percent of those testing at VCT tournaments are males, roughly half are adolescents aged 15-24, and a majority are accessing VCT for the first time. Effective and proactive communication regarding prevention, organization, testing partner, and care and treatment provider is essential to the model’s success. Linking VCT soccer tournaments to home-based clinic outreach initiatives is recommended to effectively integrate patients into care and treatment services. Trained peer educators can assist in ensuring that those who test positively successfully enroll at clinics and adhere to treatment regimens.

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MOPE0422
Rapid, consumer controlled testing without third party counseling or test interpretation
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Background: Voluntary counseling & testing (VCT) is a paradigm that has demonstrated the need for an additional protocol in the context of VCT services. It is particularly relevant during the VCT process when the availability of both rapid saliva & blood spot antibody HIV tests & blood spot antigen & antibody rapid tests, the traditional VCT methods persist.

Methods: Review of existing research literature on national policies regarding HIV testing, variations due to population, & documented gaps between policies & field implementation of HIV testing. Experience in each country while conducting large, multi-city randomized controlled trials & observing VCT in community settings.

Results: No country has yet made consumer controlled, rapid HIV tests available. Three controlled studies of home-based HIV testing with third party intervention indicates the high uptake of HIV testing in home settings. Recently, policy makers in South Africa have objected to the broad diffusion of community-based testing trials that have conducted opt-out consent with their implementation regionally of HIV testing without significant problems. Uganda appears willing to explore the availability of rapid, consumer controlled HIV testing. The Food & Drug Administration of the U.S. is considering, but implementation regionally of HIV testing without significant problems. Uganda has provided guidance and technical support to several countries in their implementation of consumer-controlled testing. This paper provides a preliminary overview of the current status of consumer-controlled testing in Africa.

Lessons learned: Further evaluation should assess the impact of these events on participants attitudes towards testing as well as the loss-to-follow-up rates. Prevention programs and testing partners can assist in ensuring that those who test positive successfully enroll at clinics and adhere to treatment regimens.

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Approaches to counselling and testing in children and caregivers MOPE0423-MOPE0427

MOPE0423
Implementing PITC in child health clinics: experiences from a pilot project in two districts in Northern Tanzania
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Issues: Despite the scale up of PMTCT programs, the identification and enrolment of HIV-infected children still poses a major challenge in many countries. Many HIV-positive mothers and their HIV-exposed children are lost to follow-up after delivery. Although provider initiated testing and counselling (PTC) is feasible and acceptable in antenatal clinics and inpatient settings, it is unknown whether it can be applied for a similar approach in child health clinics (CHC).

Description: From 2007-2009, the Elizabeth Glaser Pediatric AIDS Foundation (the Foundation) established PTC services in CHC and inpatient wards at two hospitals and eight health centers in northern Tanzania. The intervention included: sensitizing health workers (HW) on PITC; training in PITC service provision at CHC-clinic, inpatient wards and outpatient-clinics and ensuring constant supply of testing materials; conducting an integrated HIV counseling and testing (ICT) intervention at CHC for the purpose of monitoring patients. The intervention was assessed by collection of routine service data and additionally through18 focus group discussions (FGD) and 15 in depth interviews (IDI) with patients and clinicians at the sites.

Lessons learned: HW caring for children were more receptive to the approach than those from adult wards. To improve acceptance of PTC, more staff were trained on general HIV care and community sensitization was intensified. Now the acceptance of PTC remains above 95% in CHC and pediatric wards. Especially when their children are concerned, mothers agree to test whereas other adults accept it less (25-96%,♂>♀). In CHC almost half of the patients identified as HIV-exposed or infected were born to mothers who tested positive in ANC but were lost to follow-up. IDI and FGD help to identify and establish critical steps in implementation (sensitization of authorities, HW and community, as well as training paired with optimized logistics).

Next steps: Findings to be shared with national authorities and other partners. The Foundation aims at implementing the approach at all supported sites. Presenting author email: wschimana@pedaids.org

MOPE0424
Intensifying efforts to identify perinatal transmissions: applying a testing criteria for HIV affected children in Pakistan
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Issues: In Pakistan the focus on HIV testing has been primarily with adults of high-risk populations and to some extent their spouses. Little attention has been given to developing testing strategies for children living in HIV affected families.

Description: A Testing Criteria for HIV Affected Children was produced in 2008 by the National and Punjab AIDS Control Programmes and Pak Plus Society with the support of UNICEF to gain Governmental and community based organisations and Governmental institutions in testing children of HIV-positive families. Criteria was developed with the involvement of a paediatric AIDS specialist to respond to the need for NGOs to identify members’ children for testing. The criteria identifies testing strategies for children under 18 months and those 18 months through 12 years. It provides guidance on counselling children under 12 years and raises issues to consider including the presence of parents to disclose and test, and infant feeding options. The Testing Criteria also lists where to avail diagnostic HIV testing, treatment and care and prevention of parent-to-child transmission services.

Lessons learned: The Testing Criteria is a simple tool that has proved effective in scaling up testing of children in families living with HIV. The Criteria has guided NGOs providing services to HIV-positive families and clinicians in the public sector treating families on when and if to test children of positive parents. Given financial and cultural issues with accessing treatment and care in Pakistan, this guidance mitigates unnecessary clinical visits for already burdened HIV-positive families.

Next steps: The Testing Criteria should be rolled out to all public and private institutions providing services to HIV-positive persons and be integrated into training curricula of HIV, prevention of parent-to-child transmission and paediatric AIDS.

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MOPE0425
Acceptance of HIV testing for children identified through a program of voluntary home-based HIV counseling and testing in Western Kenya
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Background: Early diagnosis of HIV infection is crucial for treatment and prevention. Home-based, voluntary counselling and testing (HCT) presents a novel approach to early HIV diagnosis. Our objective was to describe uptake of pediatric HIV testing, associated factors, and HIV prevalence among children offered HCT in western Kenya.

Methods: The USAID-Academic Model Providing Access To Healthcare (AMPATH) Partnership conducted HCT in the Turbo Division in western Kenya in June-December 2008. Children less than 13 years of age and their mother were invited to join the study. If the child was HIV-negative, the mother was invited to be interviewed. If the mother was known to be dead or her living status was unknown, or mother was HIV-positive or of unknown HIV status, all children were eligible for enrollment.

Results: A total of 4196 individuals enrolled in the HCT program of whom 489 children (11.7%) were HIV positive. Children less than 13 months were unlikely to be referred for testing at the local health center. This retrospective analysis used prospectively-collected data to describe the cohort of children encountered and tested.
Results: This HCT effort identified 57,466 residents; 12,862 were children between 18 months -13 years. Of these children, 2,289 were offered HIV testing. Testing was accepted for 1,294 (72% of children) were more likely to be tested if they were older, if their mothers had more risk factors for HIV (HIV-positive, living mothers OR=3.20, 95% CI: 1.64-6.33), if parental income was not in the household (OR=1.50, 95% CI: 1.40-1.63), if they were grandchildren of head of household (OR=4.02, 95% CI: 3.66-5.58), or if their father was in the household (OR=1.41, 95% CI: 1.24-1.56). Of the eligible children who had testing, 60 (4.6%) were HIV-positive.

Conclusions: There provides an opportunity to identify and treat HIV among high-risk children. However, many caregivers of children refused HIV testing for their children. If children were eligible for HIV testing had an equal probability of HIV infection and had been tested, 46 (2%) more pediatric HIV cases may have been identified. Further investigation is needed to identify and overcome barriers to testing uptake.

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MOPE0427
Approaches to improving adherence to prevention interventions MOPE0428-MOPE0433

**MOPE0428**

**Strategies for preventing HIV in population most at risk: discordance couple counselling in TASO**

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**Issues:** Discordance is a major global challenge that the world is trying to find solutions to. Recent studies in Uganda indicate that amongst the married couples that are HIV-positive, over 50% are discordant (Sero-behavioural survey, 2005). A study by CDC on discordant couples seeking VCT at AIDS Information Centre, Uganda has also proved that discordance is a common phenomenon. Discordance puts the negative partners at highest risk of HIV transmission. Service Providers have an opportunity to save the lives of individuals and potential offspring through proper counselling and support. TASO Uganda had played a big role in the fight against HIV/AIDS; the organization has established special counselling technique. Discordance couple counselling is one of the strategies.

**Description:**

- **TASO Field Officers carryout Home Based HIV Counselling and Testing for clients before initiating them on ART in which discordant couples are identified. The couples are then referred to TASO where they are counselled and given information on HIV prevention, medical care is provided to the positive partner. The couples join the discordance club where they share experiences and get updates about discordance.

- **Lessons learned:**
  - TASO has learnt that discordance counselling enhances and promotes Family Planning uptake.
  - Discordance counselling encourages couples to accept their sero-status and helps them to adopt safer sexual negotiation skills.
  - Mobilization of discordant couples helps them to form discordance clubs in TASO which promotes information sharing.
  - Discordance counselling facilitates disclosure of sero-status to both spouses, children and community.
  - Females particularly delay to disclose due to fear of domestic violence from their sexual partners.

**Next steps:** There is need to scale up discordance couple counselling by all AIDS service providers.

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MOPE0429

**Encouraging condom use and uptake of VCT**

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**Issues:** In the past year the number of identified cases of HIV have almost doubled (from 51 to 100) and STI rates remain high. Despite this the attendance at VCT and the use of condoms remain low. For the vast majority of Timorese HIV and condoms are something new. Being a catholic country, government and civil society have until recently been reluctant to promote and distribute condoms.

**Description:** In an attempt to promote changes in sexual behavior among Clients of Sex Workers, that will reduce the risk of HIV and STI transmission, East Timor Red Cross (CVTL) have stepped up its interventions. This includes recruitment of peer-outreach, installation of condom-promotion messages, radio messages, community drama, peer-to-peer condom distribution, referrals to VCT and advocacy events with local leaders.

**Lessons learned:** Interventions have been successful to some degree and VCT uptake is increasing, but making an risk information assessment before accessing VCT is a barrier. The current challenges for condom use remain: inconsistent use, limited access points, limited understanding and encouragement by sex partners, objections to using after circumcision, alcohol use, and reported displeasure.

**Next steps:** Increasing time intensive, long-term interpersonal communication as this has been the only successful intervention which addresses the concerns and barriers for condom use and adequately promotes and supports VCT uptake.

**Description:** Continue dialogue with leaders and the church at a local level to expand condom distribution. More distribution points need to be established and mass media campaigns are needed to create social norms around its use.

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MOPE0430

**The sign of health: improving access to HIV prevention and VCT among hearing impaired people in Mozambique**

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**Issues:** People with Disabilities (PwD) represent 7% of Mozambique’s population. Hearing impaired people (HIP) are one of the most vulnerable groups among PwD due to: limited access to information and health; high literacy rate; high poverty and unemployment; stigma and discrimination; low-level knowl-

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**Monday 19 July**

- **Poster Exhibition**

**Tuesday 20 July**

- **Author Index**

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151
edge on HIV/AIDS; social exclusion and sexual violence and harrasement. To address this situation, the Ministry of Women and Social Affairs, partnering with the Ministry of Health, is implementing a HIV prevention program focused on HP.

Description: A strategy comprising two components was developed:

a) Training of peer-educators: 6 trainers skilled on sign language were trained on Sexual and Reproductive Rights and Health; HIV/AIDS; Behavior Change Communication; Community Mobilization, Gender and Sexuality. 60 adolescents and young people HP were capacitated as peer-educators themselves as same subjects. Peer-educators targeted prevention activities towards HP in schools, communities and their social networks.

b) Establishment of VCT services HP-friendly: 8 HP were trained as lay counselors to promote VCT at community-level. Additionally, 4 teams of health providers are being trained in sign language. Positive cases are referred by HP counselors to specific health facilities to access confidential health care.

Lessons learned: In a context of generalized epidemic, it is essential to develop tailored actions to specific groups to enhance HP prevention and to guarantee human rights. Full involvement and participation of HP in prevention activities is a key element for successful HIV Prevention initiatives. Integrated and comprehensive health care and programs must be implemented in order to address HP specific issues.

Next steps: Scale-up the program to all provinces in the country; ensure Sexual and Reproductive Health counseling and care for HP; strengthen policies to ensure sustainability of actions; disseminate sign language messages amongst social networks.

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MOPE0431

From awareness to adoption: the effect of condom social marketing on condom use in Bangladesh

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1Panjab University, Psychology, Chandigarh, India, 2National AIDS Control Organisation, Bangladesh Country Office, HIV/AIDS Sector, Dhaka, Bangladesh, “Durjoy Nari Shangha” consortium-leaded by Female Sex Workers self help group organization, is promoting social marketing of male condom along with information, services and utilization of condom in Bangladesh under a programme titled “HP-3”, implemented by GLIDEH. Under this approach condoms are procured by DNS at wholesale price, and sold to FSWs through different outlets from outreach workers and depot holders. This approach been strengthened by access to and utilization of service, community mobilization and creating enabling environment. Data April 2008 - April, 2009 revealed, 12559 SWs were involved in condom use trend in last 24 hours with clients 75% verified by enabling environment. Data April 2008- April, 2009 revealed, 12559 SWs were involved in condom use trend in last 24 hours with clients 75% verified by anonymous condom use survey.

Lessons learned: A comprehensive social marketing approach starting with the process of exposure of information, services, community mobilization and social marketing of condom simultaneously facilitated target group to build ownership to initiate translating knowledge in to desirable behavior changes. This transition of behavior change is reflected by the increases of condom use by FSWs and clients.

Next steps: When used appropriately social marketing based public health interventions can help to prevent and control HP prevention. This model can be adopted by other implementing partners working with similar target population.

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MOPE0432

A study of interplay of emotional intelligence and spirituality in decreasing HIV risk behavior in Indian adolescent females

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Background: With the rampant increase in the number of HIV affected individuals in India, there has also been a sharp rise in the research targeting the organismic variables that play a key role in increasing the chances of high risk behaviour among people. The study was conducted with two objectives; (i) to understand the role of components of emotional intelligence and spirituality in decreasing HIV risk behaviour and (ii) to observe the impact of spiritual awakening in subjects as a result of their emotional intelligence.

Methods: A total of 102 female subjects were sampled for the study. The Schute Self Report Emotional Intelligence Test (SSET) and Brief Spirituality Scale (22 items questionnaire measuring spirituality and well being) were administered to the subjects. The HIV risk behavior was assessed through Adolescent Risk Inventory (ARI). Pearson's correlation was calculated to study the degree and direction of relationship between emotional intelligence and risk behavior and spirituality and risk behavior.

Results: A negatively significant relationship (p < .01) was found between emotional intelligence and high risk behaviour. The study also revealed a significantly negative relationship between spirituality and risk behavior and high risk behaviour (p < .01).

Conclusions: The study has high practical applicability in terms of preventive interventions for high risk patients. It aims to emphasize the importance of interventions aimed at enhancing emotional intelligence and spirituality and serenity levels of individuals to lower chances of HIV risk behaviour.

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MOPE0433

Promoting safer sex with pleasure: a case study of the Pleasure Project’s six years of building bridges between academia, public health and the porn world

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Issues: The public health response to HIV prevention largely focuses on risk and negative outcomes of sex, avoiding discussion of positive motivations such as pleasure, desire and love. As decision-makers search for innovative ways to promote safer sex, with disappointing rates of condom use worldwide, recent advocacy efforts have challenged the ‘sex-negative’ approach by promoting the eroticization of safer sex.

Description: This case study profiles one of the key organizations promoting pleasure components in HIV prevention: The Pleasure Project (TPP), based in the UK and India. It outlines the public health response to HIV prevention, barriers to challenging commonly held beliefs about prevention, and the feasibility of taking a positive approach, especially in resource-limited settings.

It details how TPP communicates messages about eroticizing safer sex to diverse audiences, including academia, the public health sector, mainstream media and the ‘porn world’. The paper also discusses ethical and practical issues and less well, in these efforts since the organization’s start in 2004.

Lessons learned: With an informal volunteer staff, and a non-profit, regular funding, TPP has contributed to the published evidence base (e.g. The Lancet); presented at major events (The Royal Society of Medicine, International AIDS Conferences); received award nominations (An Erotic Award for Activist of the Year, and a Joint BMJ award for Getting Research into Practice along with a Research Programme Consortium); and opened up dialogue about pleasure/desire as risk/protection factors in prevention interventions among researchers. TPP has created some of the only practical tools for implementation of pleasure principles in interventions, e.g. training curricula for health educators, unique publications and popular online resources, and safer-sex erotic films.

Next steps: TPP will continue to increase awareness, particularly to influencers, researchers and donors to test pleasure components against mainstream prevention methods to determine effectiveness, dosage and feasibility in a range of contexts.

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Combination of prevention and treatment of HIV

MOPE0434

Drug-resistant HIV transmission to drug-naïve patients in Burkina Faso

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Background: The availability of antiretroviral therapy (ART) to patients infected with HIV in Burkina Faso has increased since 2004. However, data on HIV drug-resistance are few and the impacts of ART on the virus transmission are unknown. The aim of this study is to determine the rate of drug resistant HIV in naive patients as a tool to assess the efficiency of the national HIV prevention program.

Methods: Blood samples were obtained from 104 confirmed drug-naïve HIV-1 patients at the University Hospital in Ouagadougou, from November 2004 to November 2006. Informed consent was obtained from all patients participating in the study. For each patient, the CD4 cell count and quantification of viral RNA were done in Ouagadougou. RNA extraction and RT-PCR were performed at the University of Heidelberg (Germany) using the Virurseq kit. PCR products were separated on agarose gel; amplified fragments containing the protease and 5′ reverse transcriptase regions were purified and sequenced on a ABI3100 sequencer. Phylogenetic and bootscan analyses were done on the pol gene fragment to determination drug resistance polymorphisms/mutations. The P-values < .05 were considered statistically significant. The prevalence of primary drug resistance mutations was identified sequences. The prevalence of primary drug resistance mutations was identified.

Results: Thirty-one patients were males versus 73 females, and their median age was 37 years. Most patients (66.6%) were at stage C with CD4+ cell count < 200 cells/mm³. The 104 HIV pol sequences analyzed included 46 CRF02_cpx, 39 CRF02_AG, 4 subtype A, 2 CRF09_cpx-like and 13 unclassified sequences. The prevalence of primary drug resistance mutations was 12.5%, all mutations arising in the RT sequences. Drug resistance mutations occurred at similar frequency among patients infected with CRF02_AG and CRF06_cpx, 39 CRF02_AG, 4 subtypes A, 2 CRF09_cpx-like and 13 unclassified sequences. The prevalence of primary drug resistance mutations had been transmitted based on the timing of the study and the disease history of each patient. These data show new challenges in the prevention of HIV transmission in Burkina Faso.

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HIV counselling, testing and diagnostic strategies

**MOPE0435-MOPE0483**

**MOPE0435**

*You can do it everywhere* VCT: the HIV testing briefcases or taking VCT into the streets

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**Issues:** Uptake of HIV Voluntary Counseling and Testing (VCT) remains low in Morocco despite efforts to scale up the service. The NGO ‘Association marocaine de lutte contre le sida’ (ALCS) runs 21 VCT centers across the country and 5 mobile VCT vans but started in 2008 introducing a new concept of VCT delivery: the HIV testing briefcases.

**Description:** Counselors of ALCS are equipped with briefcases containing HIV rapid test kits, safety equipment, and a folder with information used to provide VCT. Counselors visit collectivities or facilities where people gather (e.g. private medical clinics, high schools, universities, traditional markets...) and offer, during 1 or 2 hours, anonymous and free of charge VCT to attendants. Moreover, the briefcases are also used in outreach prevention programs as immediate on-site offer of VCT for the programs’ beneficiaries (Male and Female Sex Workers, Men Having Sex with Men, Truck-drivers).

**Lessons learned:** ALCS VCT-briefcases actions took place allowing to perform 991 HIV tests. In the same years, in the ALCS’VCT facilities, 10,810 clients were tested through the mobile strategy and 10,042 in the fixed sites. Uptake of VCT when taken to the client is high. Clients reported the convenience of such initiative that allow people to get tested without being seen entering an HIV VCT site, which can be potentially stigmatizing.

**Next steps:** This original way of HIV testing and counseling delivery may help increase HIV testing coverage and ALCS is now reconsidering allowing more place to VCT-briefcases service delivery in its VCT programs. Issues related to sustainable funding have to be addressed first and a close monitoring of the intervention must be put in place.

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**MOPE0436**

Factors associated with low HIV testing among injecting drug users (IDU) in the highest HIV prevalent state of India

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**Background:** Despite continued high HIV prevalence among IDUs in Manipur, the highest HIV prevalent state of India, research is lacking to understand the low HIV testing among them. Because HIV testing can play important role in combating HIV transmission, HIV-related treatment and care, we sought to identify the sociodemographic correlates of HIV testing among IDUs in Manipur from IBBA first round data.

**Methods:** A total numbers of 839 IDUs, aged ≥18 years were recruited using respondent driven sampling (RDS) method in 2006 from Churachandpur and Bishenpur districts of Manipur and interviewed to collect socio-demographic, behavioural data. Odds ratios were calculated using logistic regression analysis to find out the sociodemographic correlates of ever HIV testing using SPSS software.

**Results:** Only 25.7% and 17.9% IDUs in Churachandpur and Bishenpur districts respectively had ever been tested for HIV. Among the 270 HIV-positive IDUs, 60% reported never having a HIV test. In the univariate logistic regression analysis increasing age and increasing educational level was positively associated with ever having been tested for HIV in both districts. Furthermore, in the univariate analysis, being married was also significantly (<0.05) associated with ever testing in both Bishenpur (COR=1.9) and Churachandpur (COR=1.9) districts. In the multivariate analysis, educational status showed independent association in both districts. The highest educational group (schooling: 11 years +) was at five times more likely to ever have been tested compared to illiterates. Being older than 30 years was also independent associated with ever having been tested for HIV.

**Conclusions:** Intensification of HIV testing campaign among IDUs in Manipur is urgently needed. High proportion of HIV-positive IDUs have never been tested for HIV eluding them from treatment and care. The interventional programme should specially target the illiterates/low educated, young aged, unmarried IDUs to increase the uptake of HIV testing.

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**MOPE0437**

Conducting mobile HIV counselling and testing (CandT) in hard-to-reach settings: a DOD success story of the Rwanda Defense Forces (RDF)

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**Issues:** Rwanda Defense Forces (RDF) are typically young, active, highly mobile, living far away from home for a considerable period of time and have stable income. This puts them at a risk of acquiring HIV infection. HIV prevalence in the RDF stands at 4.5% compared to 3% in the general population. There is considerable challenge of reaching the RDF with C&T services since in most cases, RDF live in hard-to-reach areas.

**Description:** Mobile VCT provides an opportunity for soldiers who live in hard-to-reach areas access C&T services and also establishes a current HIV zero status. Knowing one’s zero-status will help initiate behavior change as to avoid infection (or prevent transmission to others) and also help soldiers obtain referrals to receive additional prevention, care and treatment.

**Post-test clubs provide ongoing support, including prevention for positives and negatives.** Sites for mobile RDF are selected within one kilometer of a military camp and the mobile RDF unit has all equipment and expensable traveller. A “Advance party” mobile video travels a week prior to actual VCT date to sensitize soldiers. VCT Team stays on a brigade until demand is met.

**Lessons learned:** There is a high demand when mobile VCT is available and promoted. Mobile VCT can help to evidence-based decision making; lead to provision of services, forecast care and treatment needs and lead to troops readiness for their mission. A very well executed program reduces stigma and discrimination but most importantly, a supportive military leadership is crucial for strong programs.

**Next steps:** With DOD-PEPFAR funding, partners will reach more families of tested soldiers with mobile C&T (couples counseling and testing) services. It is important to expand services to “capture” influential audience and engage men as partners for family planning, deal with gender based violence and alcohol, Fidelity issues.

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**MOPE0438**

Usage of self-tests for HIV and STI in the general population versus sexual risk groups

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**Background:** Self-tests are commercial tests done autonomously by the tested person without involving a medical doctor or certified laboratory. We assessed HIV/STI self-test use among three populations in Amsterdam.

**Methods:** Data regarding demographics, sexual behaviour, and HIV/STI self-test use were collected between 2007-2008 in a representative population-based health study among 2,687 inhabitants of Amsterdam aged 16-54 years; among 419 homosexual men from the Amsterdam Cohort Studies (median age=25 years, IQR=23-35 years); and in an anonymous bi-annual HIV-survey among 1,995 STI-clinic visitors (median age=27 years, IQR=23-35 years).

**Results:** In the past 12 months, 0.8% (95%CI:0.1-1.3%) of the Amsterdam population aged 16-54 years used self-tests for HIV/STI of which 30% (95%CI:24-38%) for HIV. In univariate analyses, HIV self-test use was higher among men (0.4%; women: 0%; p<0.01), low educated individuals (0.6%; highly educated: 0.1%; p=0.03), homosexual men (1.0%; heterosexual men: 0.4%; women: 0%; p<0.01), individuals reporting >9 sexual partners (1.0%; 2-9 partners: 1.2%; 1 partner: 0%; p<0.01), and among Surinamese and other non-Western individuals (0.6%, 1%; Dutch: 0.1%; p<0.05). In the study among homosexual men, 0.2% (1/419) ever used a self-test for syphilis, and 1.7% (7/419) for HIV (no statistics were performed due to small numbers).

Of the STI-clinic visitors, 2.1% (41/1,995) used self-tests for HIV/STI in the past 6 months. In univariate analyses, older age, homosexual orientation, and having had sex with a HIV-infected partner were significantly associated with HIV/STI self-test use. In multivariate analyses, only age remained significantly associated: those >34 years were more likely to self-test compared to those < 22 years (OR=4.7, 95%CI:1.4-15.9).

**Conclusions:** Self-test use in the general population is low, but seems higher among groups at increased risk for HIV/STI. Professional health care providers need to monitor these trends as self-test usage might become more popular, and should consider the development of supportive interventions.

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MOPE0439

Results of a randomized controlled trial of home-based versus TB clinic-based HIV voluntary counseling and testing for family and household members of TB evaluation patients in Uganda

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Background: TB patients and their families are a high priority group for HIV testing; however testing rates in this population remain low. We tested a structural intervention of home-based HIV voluntary counseling and testing (VCT) designed to reduce barriers to testing for family members of TB patients.

Methods: Households of 302 HIV tested TB evaluation patients presenting to the Uganda National Tuberculosis and Leprosy Control Program Clinic in Kampala, Uganda were randomized within HIV status to either home-based or TB clinic-based HIV VCT. TB clinic-randomized testers were reimbursed for travel costs to the clinic. We calculated adjusted odds ratios for household member HIV testing using generalized linear mixed models accounting for household clustering.

Results: Home-based HIV VCT had significantly higher proportions of household members HIV-tested compared to TB clinic-based VCT overall and within HIV status groups. Within the household, the odds of HIV testing for clustering, the primary outcome variable, were 5.4 (95\%CI: 3.1 - 9.3, p < 0.0001) for Home-based VCT compared to TB clinic VCT. In multivariable analysis, home-based VCT, index patients with HIV status, and household size were all independently predictive of HIV testing success.

Conclusion: Home-based HIV testing as a tool to bring testing to family members, is cost-effective and provides more accessible testing. Home-based testing model can be an effective tool to increase HIV testing in the general population.

MOPE0440

Progress in expanding HIV testing and counselling in the Caribbean to achieve universal access

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Background: HIV testing and counseling is critical for the achievement of the goals of universal access. In the Caribbean, from 2006, PAHO/WHO has been promoting the expansion of HIV testing using the strategy of the provider initiated testing and counselling (PITC), rapid testing and integration of HIV testing into primary care services.

Methods: The WHO one-day PITC training curriculum was adapted for the Caribbean and Trainer of Trainers (TOT) package developed and utilized for capacity building. The WHO/DCDC rapid HIV testing training curriculum was also adapted and capacity building provided which included guidance on field validation of algorithms and providing more personal safety assurance. Guidelines were developed on policy, programmatic and key operational issues were also developed and distributed to support programme implementation.

Results: Between 2007-2009, four sub-regional TOT workshops supported capacity building for more than 120 health care providers in 28 countries. In-country workshops, trained over 300 health care providers. Information was also provided on basic HIV, TB, STI and PMTCT, planning and M&E for HIV testing and stigma and discrimination. In 2007, six countries reported 369,991 persons tested and received results, increasing to 631,875 in nine countries in 2008. Use of rapid HIV testing in primary care clinics increased from three countries in 2006 to 2009 the eight countries with expansion occurring in the number of sites in each country.

Conclusions: Further expansion of HIV testing should focus on increasing access to most at risk populations and must be accompanied by enhanced post-HIV test support and referrals. PITC and rapid HIV testing methods are essential strategies, more health care and other providers must be trained in these methods and HIV testing must continue to be integrated into other services to provide access to all.

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MOPE0441

3,500+ tested in a day!! Uganda model highlights the need for accessible testing models

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Background: Access to HIV counseling and testing remains elusive to many in Uganda despite successes made in the early 90’s that enabled HIV sero-prev- alence rates to drop from 18% to 6.1% by 2003. It’s been estimated that only 50\% of the population know their HIV status, leaving over 20 million people without knowledge of their HIV status.

Methods: A joint collaborative effort spearheaded by AHF - Uganda Care and six partners was held at the Nakivubo Stadium to commemorate World AIDS day in the objective of increasing access to convenient and efficient testing. Through active community mobilization using peer educators, radio announcements, notices and entertainment over 6,000 individuals were mobilized. This single day event had a record number of 3,518 individuals tested at a single event in Uganda with 191 individuals identified HIV-positive and referred for chronic HIV care.

Conclusions: People want to know their HIV status but access is still limited:
- Stigma is a barrier to testing as individuals are willing to line up in the open to get tested.
- Active mobilization and sensitization attracts large numbers for testing.
- Rapid testing models and technologies including screening tests that give results within one minute allow for large scale testing.

Next steps: Replication of testing models that are convenient and efficient at testing thousands of people in one day and linking HTS clients to care should become the cornerstone of the contemporary Prevention and Treatment program in the fight against HIV/AIDS.

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MOPE0442

Institutional readiness to implement provider-initiated HIV testing and counselling (PITC) services at public health sector facilities in Zimbabwe

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Background: In 2007 the Zimbabwean Government scaled up PITC nation-wide. All patients presenting at health institutions are routinely offered HIV testing. An assessment of institutional capacity to provide PITC was conducted in January 2010.

Methods: Sixteen sites were purposively selected; tertiary (n=2), provincial (n=5), district (n=6) primary health facilities (rural = 1; urban = 5). A semi-structured interview was conducted with the site leader or designated individuals who were involved in implementation of PITC.

Results: PITC was at least partially implemented at all sites. The interviewer felt that management were fully committed to PITC implementation at 15 sites. While PITC was reportedly offered 5-7 days a week at all sites, in practice this did not happen due to staff/test kit shortages. When staff/test kits were short, priority was given to antenatal clinic attendees. In most sites (n=15) PITC was not implemented according to standard operating guidelines due to inadequate training in PITC, counselling and/or rapid testing. Counselling was primarily conducted by primary counsellors (non-clinical cadre); nurses reported feeling ill-equipped to deliver counselling. Nurses undertook rapid HIV testing in 14 sites. In 2 sites testing was done by laboratory scientists resulting in delay in provision of results. In 10 / 4 sites space to provide confidential counselling / HIV testing was inadequate. The supply of test kits was erratic, because projections did not account for increase in the clients tested. Staff reported lower motivation to test people if there was a long waiting list for ART initiation. In (n=14) institutions there was regular supply of ARVs and Cotrimoxazole prophylaxis. In all sites staff had been trained on ART.

Conclusions: PITC has been scaled up nationwide through all levels of health care to some extent. Staff shortages create challenges for full implementation. Introducing the primary counsellor cadre has been crucial to successful implementation.

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MOPE0443

Situational analysis of HIV testing in private laboratories in Hyderabad

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Background: Nearly 82\% of population accessing private sector for health care services which varies tremendously in quality. CD-Malaria remains a major health sector in India, points to the highly fragmented condition of the private healthcare infrastructure and raises the need for regulatory authority. HIV diagnosis is entry point for a person living with HIV/AIDS into any health-care service.
service and it clearly depends on high quality laboratory testing and reporting. Hence, APADSDCN planned to conduct a situational analysis of the private laboratories regarding the current practices, the current laboratory services and the capabilities of the private laboratories for HIV testing and to assess their willingness to enroll into the national HIV/AIDS program and provide services.

Methods: Hyderabad was divided into five zones to assess 30 labs per zone using specially designated questionnaire. 163 labs were approached but only 133 were prepared for the assessment.

Results: 96% of the labs were doing rapid HIV test. None of the labs was providing any HIV testing counseling and taking written consent of the patient for testing. Only 5% had some form of quality control. In 18%, there was no lab specialist to certify the reports, 88% did not attend any formal training on HIV testing, 27% were not aware of universal precautions, 32% did not have color coded bins for waste segregation, 74% were not aware of PER, 82% did not have PER protocols, 94% did not have PEP kits. 99% were ready to enroll into a certification program and 60% preferred a two days training program.

Conclusions: Approximately 43056 HIV tests per annum are being conducted in these 133 labs (8-10% of the total labs in Hyderabad) not conforming to NACO strategies. There is huge opportunity to involve private sector through periodic training programs and certification process.

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MOPE0444
The influencing factors of providing provider-initiated HIV testing and counseling service in gynaecological clinics of middle cities in China

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Background: As an element of HIV/AIDS prevention, the provider-initiated testing and counseling (PTC) service has been provided in many countries because of its positivity, pertinency and convenience to provide clinical treatment. But the service has not been promoted to provide in the clinic in China, and the influencing factors of providing PTC service in the gynaecological clinics for female patients have not been clearly identified.

Methods: Both qualitative and quantitative methodologies were employed in the field investigation in 8 gynaecological clinics of four middle cities in China. 20 gynaecologists were interviewed with semi-structured questionnaire and 164 patients were investigated with a structured questionnaire. All qualitative data were coded, sorted and conceptualized by different themes. The quantitative data were inputted into a database and analyzed with SPSS 13.0 software.

Results: 1. The gynaecologists interviewed included 13 women and 7 men. Most gynaecologists were eager to receive HIV/AIDS training to provide the PTC service to the risk people, but few of them received standard training. Though they would like to provide the service, it was hindered by patients’ low acceptability, doctor’s high workload and lack of service time;

2. 381 female patients in the gynaecological clinics were investigated. 65.4% of the investigated patients knew the HIV testing and counseling spots, and 41.0% selected general hospital as the favourite testing and counseling spot.

Conclusions: To provide the PTC service in the clinics, the standard PTC service training and HIV/AIDS knowledge should be provided to the gynaecologists and the patients respectively, the testing charge should also be decreased.

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MOPE0445
Perceptions and attitudes towards home based voluntary HIV counseling and testing (HBVCT) in Bushenyi District, Uganda

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Background: Globally, a Universal access HIV counseling and testing (VCT) being a gateway to other HIV/AIDS services, has been advocated for as one of the powerful tools to eradicating HIV epidemic. In 2004, a universal access to HBVCT program was implemented in Bushenyi district but results showed some individuals did not receive the service. In 2009, Irish Aid funded this study to explore community’s perceptions and attitudes towards such a HBVCT program by finding out why some individuals did not receive a HBVCT service.

Methods: A quantitative community-based survey was conducted using a questionnaire among 200 household members both who did and did not receive a HBVCT service.

Results: Among 200 respondents, 192 (96%) acknowledged they had heard about HIV/AIDS, 76% had access to community resource persons, 164(82%) said they felt very well with counselors finding them at home 174 (87.0%) were willing to take a test in a home based setting. However, 181 (90.5%) viewed/rated a HBVCT service as good plus mainly for its 3Cs - convenient, confidential and credibility. However absence from home and lack of information when counselors were coming to visit their homes, largely constrained (22.5%) and (15%) of the rural and urban populations respectively to receive HIV testing and counseling services.

Conclusions: The identified constraints of absence and information gaps are critical in reducing the uptake of HBVCT and must be addressed.

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MOPE0446
HIV testing at four bathhouses in Barcelona city, Spain

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Background: Unprotected sex in men who have sex with men (MSM) in bathhouses continue to happen in most urban areas. These venues present a challenge to developing strategies to prevent the spread of human immunodeficiency virus (HIV), however they also provide opportunities for interventions to reduce the risk and rate of disease transmission. No city in Spain has developed programs that offer HIV testing in these venues. Similar programs have not existed before in Barcelona.

Methods: A rapid HIV testing program was implemented between 2006 and 2009 at 4 bathhouses in Barcelona. In addition to HIV testing, behavioral and demographic data were collected from presumed HIV-negative participants. Descriptive analyses were performed using SPSS version 13.

Results: Of the 443 different men tested 27 (6%) were HIV-positive for the first time in 2006; 36 (8%) of the 453 tested in 2007; 32 (9%) of the 350 tested in 2008, and 23 (9%) of the 254 tested until mid-2009. The mean CD4+ cell count was 475 cells/mm³ and 26% was below 350. 20% of tested men were tested for the first time by our program.

Conclusions: The program tested men not in more traditional medical settings and recruited MSM who were at high risk for HIV infection. The incidence of a new HIV diagnosis was higher than in other settings. Bathhouse-based testing to detect HIV infection in these venues may be a good strategy to reduce the forward transmission of HIV in this population.

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MOPE0447
Characteristics of HIV-positive patients detected through a combined program of opt-out routine screening and targeted testing in a Southern United States Emergency Department

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Background: To describe characteristics of HIV-positive persons detected in an Emergency Department (ED) using both the US CDC recommendations for opt-out “HIV testing” and targeted HIV testing in ED-based HIV testing is effective at detecting persons with all stages of HIV infection and to assess their willingness to enroll into the national HIV/AIDS program and provide services.

Methods: All persons aged 13 to 64 years who presented to the ED beginning March 2008 for an illness or injury were eligible to be offered a free OraQuick® rapid HIV test, on an opt-out basis. During routine screening periods, testing was performed by trained HIV Counselors. Outside of routine screening periods, testing was performed by ED staff on patients presenting to the ED with an AIDS-defining illness or STD. A blood sample was obtained via venipuncture for Western Blot testing to confirm preliminary results.

Results: From March 2008 through January 2010, there were 10,077 tests performed (10,088 during routine screening and 69 after-hours). There were 42 confirmed positive patients identified during routine screening periods—an incidence of 0.42%. CD4 counts and viral loads were available for 33 of these patients. The median CD4 count was 268, with 42.4% (n=14) of patients having CD4 counts below 200. Viral loads ranged from 48 to 3,840,000. Sixty-seven percent (n=28) of patients detected during routine screening attended an initial clinic visit. There were seven patients detected after-hours—an incidence of 10.1%. CD4 counts and viral loads were available for six of them. The median CD4 count was 27, with all of them having CD4 counts below 200. Viral loads ranged from 14,000 to 223,500. Five after-hours patients attended an initial clinic visit.

Conclusions: ED-based HIV testing is effective at detecting patients with all stages of HIV infection and providing access to HIV testing. Although targeted testing had a much higher incidence than routine screening and lower initial CD4 counts, targeted testing by itself would have missed many patients with HIV.

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155
Exhibition
Monday 19 July
Poster Exhibition
Tuesday 20 July
Author Index

MOPE0448
ACTS: the right tool for the job. How a new approach to HIV screening is helping the Western Cape of South Africa maximize its clinical response to HIV/AIDS
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Issues: While HIV/AIDS is South Africa’s greatest health scourge, HIV screening is not routine in public health clinics. Instead, VCT is generally tasked to lay counselors using a 20-45 minute pre-test procedure that limits productivity to about 8 patients tested/day. The current approach gives only a fraction of patients the opportunity to learn their HIV status.

Description of project: ACTS (Advise, Consent, Test, Support) is a new routine HIV screening system featuring: streamlined pre-test counseling deliverable in as little as 1-2 minutes, task-shifting that includes nurses and doctors in the screening process, and practice change support including site-specific implementation planning, training and monitoring and evaluation.

In 2008, Cape Town’s Tygerberg sub-district achieved a doubling of the proportion of adult population tested using ACTS and other initiatives (11% to 24%). Consequently, in June 2009 the Western Cape provincial Department of Health voted to scale up ACTS HIV screening in all 480 of its public health facilities. Working alongside government, ACTS is co-managing an expanded implementation and support plan that will optimize testing in health facilities province-wide.

Lessons learned: Despite initial fears of more work (nurses) and obsolescence (lay counselors), the public health sector can be mobilized to embrace a paradigm shift in HIV screening so that patients accessing other services can routinely learn their HIV status and access HIV care. Innovative buy-in (district-wide retreats), training (nurse and multimedia) and support (on-site mentoring) strategies were used to effectively change entrenched HIV screening practices. Additional programs are needed to engage diagnosed patients in care.

Next steps: Ongoing implementation of ACTS will be done in collaboration with government and local partners to engage and mobilize local communities to support ACTS. Additional strategies to support routine screening, ACTS provides a highly-adaptable model for HIV testing in public health facilities across South Africa.

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MOPE0449
Bringing health facilities to the people: HIV counseling and testing (VCT) in a public square
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Issues: In Peru, many health care facilities offer HIV testing, but very few people get tested. Socio-cultural barriers are the main reason for low motivation. Initiatives to make VCT facilities available to people outside traditional health care settings are needed.

Description of project: Twenty module units were used to provide free VCT services with rapid HIV tests in a public square in Lima. We utilized television, radio, press and billboards to promote this activity, and brought in musicians and games to attract participants. The team consisted of 28 health care providers and 9 lay counselors.

We tested 757 people (66.1% men, 33.9% women). Sexual orientation included: heterosexual (84.8%), homosexual (7.0%) and bisexual (7.6%). Of all participants, 62.7% had never been tested for HIV, 49.8% didn’t know the location of VCT facilities, and 36.9% engaged in HIV risky activities during the last year but didn’t recognize them as such.

Furthermore, 68.4% didn’t use a condom during their last sexual intercourse and 12.4% had unprotected sex with both stable and occasional partner(s) during the last year. Reported reasons for not using condoms included: forgetting their partner (36.0%), not liking condoms (24.9%), partner objection (15.8%), non-availability of condoms (8.8%) and alcohol use (4.3%). Overall, 1.1% tested positive for HIV and received emotional support and health education information.

Lessons learned: By providing innovative, free and confidential VCT services in a public square, we reached 475 people who had never received HIV testing. Socio-cultural barriers are the main reason for low attendance. Hence, if VCT facilities were to be widespread, the public health sector should be mobilized to embrace and support local initiatives.

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MOPE0500
Evaluation of a dental clinic-based rapid HIV testing initiative
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Background: Rapid HIV testing in non-traditional clinical settings such as dental clinics targets individuals who may not have access to HIV testing and other health care. In March 2008, a rapid HIV testing initiative based at the dental clinic at Harlem Hospital was launched. The hospital serves Central Harlem, a community with an HIV seroprevalence of 2.9%, the second highest in New York City.

Methods: A full-time, trained counselor approached patients while they waited for their dental appointments. Demographic information and HIV risk factors were obtained during pre-test counseling. If the patient gave informed consent, a rapid fingerstick HIV test was performed using whole blood (OraQuick Advance Rapid HIV-1/2 Antibody Test; OraSure Technologies, Bethlehem, PA). All patients received post-test counseling and commentary of their results. Those with preliminarily positive results were asked to have confirmatory tests drawn in their presence. Patients who confirmed positive were counseled and linked to HIV primary care at the hospital.

Results: Through this initiative, 3,864 HIV tests were performed from March 1, 2008 to December 31, 2009 in the dental clinic. The 3,565 unique individuals tested represented 32% of the dental clinic’s patients. Demographics of those tested included a mean age of 38.5 years, with 47% women, 53% men, 70% African Americans and 30% Hispanics. Risk behaviors reported included as men who have sex with men (MSM) 28% of participants, positive results was 0.53% (19/3,565) and the rate of confirmed positives was 0.28% (10/3,565). All patients confirmed positive were linked to HIV primary care at the hospital.

Conclusions: A rapid HIV testing program with trained counselors and linkage to specialized HIV care can be successfully integrated into a dental clinic setting. Further studies are needed to evaluate the cost-effectiveness of this approach.

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MOPE0450
Effect of opt-out HIV testing on testing rates among high-risk individuals in sexually transmitted disease (STD) clinics
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Background: Identifying HIV-infected individuals early and rapidly linking to HIV care is essential to improving individual clinical outcomes and reduction in transmission. Before implementation of routine opt-out HIV testing in STD clinics, testing rates were estimated at 50%. We evaluated implementation of opt-out testing in public STD clinics as a strategy for testing high-risk individuals.

Methods: We reviewed clinic records of a random sample of 575 patients attending two North Carolina, US, STD clinics between 2008-2009. Multivariable logistic regression models were fit to evaluate predictors of HIV testing.

Results: The study population was 48% women, 73% African-American, with a median age of 27 years (Interquartile Range [IQR]:22-34). At STD clinic A and B, 86% and 79% of patients were HIV-tested, respectively. Overall, six patients (1%) were found to be HIV-infected. At clinic A, patients were less likely to be tested if they had tested in the prior year (Odds Ratio [OR]:0.29, 95% Confidence Interval [CI]:0.14-0.60). Patients presenting with STD symptoms were more likely to be tested (OR:6.79; CI:0.08-14.96). Among patients presenting without symptoms, there was a decreased odds of being tested in those with a clinical impression of an STD (OR:0.18; CI:0.08-0.41). At clinic B, patients with prior STD diagnoses were less likely to be tested (OR:0.33; CI:0.15-0.72). Testing did not differ by demographic characteristics or HIV risk behavior in either clinic.

Conclusions: Opt-out HIV testing in STD clinics improved testing rates by over 30% from pre-opt-out rates. With these high-risk individuals, the screening strategy to opt-out testing is indicated to optimize identification of HIV-infected patients.

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MOPE0452
Who are we reaching? An analysis of client intake data from mobile HIV testing services for men who have sex with men in Togo
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Background: While HIV prevalence among the male general population in Myanmar is 2.5%, among men who have sex with men (MSM) it reaches 28%. This contrasts the high need for effective HIV prevention programming with MSM. To inform PSI/Myanmar’s activities addressing MSM, this study investigated the differences in HIV and STI prevalence and MSM engagement in receptive versus insertive anal sex.

Methods: In the context of a transversal descriptive study, a convenience sample of 650 consenting MSM was recruited from PSI-run drop-in centers. Individuals were interviewed and biological samples were collected for syphilis and HIV (blood) and gonorrhea (urethral swab) testing. Pre- and post-test counseling was provided to participants. Based on self report, 310 participants practiced receptive anal intercourse (RAI) and 340 practiced insertive anal intercourse (IAI). Sexual roles were described as somewhat fluid, with a small proportion of all MSM (12%) reporting both receptive and insertive sex.

Results: Descriptive statistics were generated and disaggregated by sexual practice: 41% of MSM engaging in RAI and 23% practicing IAI were HIV-posi-
**Conclusions:**

From family and peers.

- Getting tested:

  - Services was collected in four provinces using in-depth interviews with 24 participants.

**Methods:**

- LGUs persons receiving VCT at World AIDS Day events in 2008 completed a survey. Of this sample, 500 persons were randomly selected for follow-up at 4 months and 372 persons (258 Females, 114 Males) responded.

**Results:**

- Respondents at baseline and 4 months did not differ on key demographic variables.

**Conclusions:**

- Multiple partnerships drive the HIV epidemic in Jamaica and persist despite access to VCT. VCT must use a deeper understanding of high risk behaviors to promote safer sex behaviors, despite relationship status or risk history.

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**MOPE0453**

Assessing the impact of outreach VCT on HIV risk behaviours: a four-month follow-up study

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**Background:**

- Jamaica has an estimated HIV prevalence of 1.6% in the general population, 4% among SWs, 32% among MSM, and 3.6% in STI clinic populations. Approximately 50% of persons living with HIV in Jamaica are unaware of their status. Outreach voluntary counselling and testing (VCT) for HIV is a strategy for case detection and counseling. A study was conducted to determine: 1. The impact of VCT on risk behaviours; 2. The relationship between intentions and future behaviours.

**Methods:**

- LGUS persons receiving VCT at World AIDS Day events in 2008 completed a survey. Of this sample, 500 persons were randomly selected for follow-up at 4 months and 372 persons (258 Females, 114 Males) responded.

**Results:**

- Respondents at baseline and 4 months did not differ on key demographic variables.

**Conclusions:**

- Multiple partnerships drive the HIV epidemic in Jamaica and persist despite access to VCT. VCT must use a deeper understanding of high risk behaviors to promote safer sex behaviors, despite relationship status or risk history.

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**MOPE0454**

Injecting drug users participate in reducing barriers to HIV counseling and testing in Thailand

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**Background:**

- Injecting drug users (IDUs) are a hard to reach population disengaged from the health care system in Thailand. Estimated 2007 HIV prevalence among IDUs in Thailand was 38%. A 2008 study with IDUs in Bangkok showed that 35% of IDUs had ever received HIV counseling and testing (CT). To reduce new HIV infection among this at-risk group, IDUs must be engaged. A 2008 study with IDUs in Bangkok showed that 35% of IDUs had ever received HIV counseling and testing (CT). To reduce new HIV infection among this at-risk group, IDUs must be engaged.

**Methods:**

- LGUS persons receiving VCT at World AIDS Day events in 2008 completed a survey. Of this sample, 500 persons were randomly selected for follow-up at 4 months and 372 persons (258 Females, 114 Males) responded.

**Results:**

- Respondents at baseline and 4 months did not differ on key demographic variables.

**Conclusions:**

- Multiple partnerships drive the HIV epidemic in Jamaica and persist despite access to VCT. VCT must use a deeper understanding of high risk behaviors to promote safer sex behaviors, despite relationship status or risk history.

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**MOPE0455**

Predicting partner HIV testing and counseling following a partner notification intervention

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**Background:**

- In 2004, to offer Provider Initiated Testing and Counselling (PITC) in 2 major national referral hospitals, regional referral hospitals and the community has contributed to increased access to HCT and linkage to care. As more clients access PITC, MJAP realised that their families were at high risk of acquiring HIV. The Family Based Care (FBC) approach was initiated in 2006 to offer family members of HIV-positive clients a comprehensive intervention including counselor assisted disclosure, psychosocial/prevention counselling, mosquito nets, de-wormers, condoms, safe water vehicles, co-trimoxazole prophylaxis,
referral to HIV care and OVC support. Whereas this approach reaches many family individuals, the demand for HCT among the community members is still low.

Description: In 2008, the FBC program incorporated a community-based component in EJHA, which was not successful. After being informed about the high level of the HIV-positive index clients consenting for home visits. As opposed to supporting only clients' household members, the neighboring community is mobilized to community members who test positive are referred to HIV care clinics of their choice within their locality.

Lessons learned: Integration has tremendously increased access to HCT services within MJAPs' catchment area. Analysis following integration for 3 months showed doubling of the number of families and individuals tested from 475 (95% of target) to 957 (191% of target) and 767 (51% of target) respectively. HCT acceptability is high at 98%. The PLHIV now form a core group in community mobilization for HCT services.

Next steps: Integrating community approaches and use of PLHIV for community mobilization for HCT increases demand and access to HCT services. Presenting author email: namayanjem@yahoo.com

MOPE0458
Mexico: rapid tests in community spaces to expand access to early detection and treatment of HIV

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Issues: Routinely annual HIV testing and immediate linkage to treatment for HIV-positive clients could reduce the incidence and mortality to less than 1 death per 1000 cases. In 1998 to 2004 to less than 1% over the next 50 years. To enhance strategies for universal access to early detection and treatment among MSMs, AIDS Healthcare Foundation initiated a community-based Rapid Testing program in 2007.

Description: Contributions to achieving universal access to early detection and treatment included the buildup of synergies among more than 20 partnerships in 14 cities across Mexico. 256 people were trained to develop local practical training courses. In 2009, 45,000 clients were tested through rapid testing. The sites of application included public places, universities, UDS rehabilitation centers and others. The rapid testing model focused on providing services to youth, MSM, TSx UDIs, women, indigenous, migrants, and the elderly.

Lessons learned: This model is flexible to different contexts, successful and widely accepted by the population. The following are key components for successful implementation: -Identifying allies and providing theoretical/practical training/Development of skills for providers of HIV counseling and rapid testing application
- Implementation of local schedules for target populations and strategic sites. -Bringing rapid testing to the community with a simple infrastructure that ensures compliance with pre- and post-test counseling, confidentiality and informed consent/Analysis of demographics and risk factors to better guide counseling.
- Monitoring and evaluation of local programs.

Next steps: To realize the full effectiveness of this model, it should be replicated in other Mexican States and abroad. It is imperative that continuous efforts are put forth to advocate for legislative change that facilitates access to rapid testing as part of the commitment to universal access and treatment. Presenting author email: jorgebedoya1@hotmail.com

MOPE0459
Community-based HIV testing with men who have sex with men (MSM) in Geneva, Switzerland: 2005 - 2008 monitoring

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Background: We present results from monitoring of the activities and clientele of the community-based VCT "Checkpoints" facility in Geneva. The facility, opened in 2005 and operated by a local gay NGO, offers rapid HIV testing and MSM-specific counseling, available 8 hours weekly.

Methods: Analysis of data from the self-assessed computerized questionnaire filled in by clients at entry, and routine facility data. Change was ascertained using Sta's t-test.

Results: The annual number of tests increased from 249 in 2005 to 480 in 2008 (2006: 282, 2007: 328). The proportion of positive tests was stable between 2005: 2.4%, 2006: 2.1%, 2007: 3.0%, 2008: 2.1%. Each year, most clients were MSM (78% to 93%); median age was between 32 and 34. Among MSM, the proportion of first ever patients increased from 86% in 2005 (n=159) to 91% in 2008 (n=332) (2006: 86%, n=204, 2007: 90%, n=271) (p=.015). The percentage of returning MSM clients increased from 21% (2006) to 33% (2007) (p<.001).

In 2007/2008, main reasons for consultation were deliberate sexual risk exposure (37%/44%) and routine screening (31%/35%). No significant trend was observed regarding risk-taking behaviors: non-systematic condom use for anal intercourse with a stable partner was 73% in 2005, 55% in 2006, 47% in 2007, and 62% in 2008. The range was 25% (2006) to 17% (2007); each year, 28% to 33% of MSM had unprotected anal intercourse at least once with a partner of different or unknown HIV status.

Conclusions: The population attending this community-based VCT is more exposed to potential HIV transmission than the general MSM population in Geneva. As people attending the facility increased each year and many used the facility for routine screening, this VCT seems to be well accepted, useful for clients and is reaching the intended population. Presenting author email: francoise.dubois-arbon@chuv.ch

MOPE0461
Is the policy of expansion of HIV testing getting to ensure equity and the right to autonomy? A study on the Brazilian seascoa

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Background: In Brazil, although it was found lower levels than in countries like USA, Canada and Switzerland, the percentage of persons tested for HIV has grown considerably, from 20% in 1998 to 32.9% in 2005. Nevertheless, national studies also indicate the existence of inequalities of gender, race, economic level and generation into early diagnosis of HIV. This study examines inequities in access to testing related to sex, age and capacity of autonomous decision.

Methods: In 2007, a household survey-based population was executed in a metropolitan area with a high prevalence of aids on the seacoast of Sao Paulo state. It was applied a structured questionnaire to residents of selected households.

Results: 56.9% of respondents had been tested for HIV in life, with a higher percentage of tests in women (63.8%) compared to men (49%). The age group most tested for both sexes was adults between 25 to 39 years old, with a percentage significantly higher in women (79.6%) than men (55.5%) probably due to incorporation of HIV testing as a prenatal routine in health services. However, while for men there is a visible expansion in HIV testing with increasing age, for women, otherwise, there is a significant decrease in testing after 24 years old, and a significant decline in testing after 40 years old. The study also indicates an important flaw in counseling, because 51.5% of respondents received no guidance about testing either before or after the testing.

Conclusions: Despite the expansion of testing, the forced connection between sexuality and reproducing contributes for a significant gap in the provision of the test for women over 40 years. Moreover, the testing process has not given due the attention to the voluntary decision, affecting the right to personal autonomy. Presenting author email: ligas@saude.sp.gov.br
MOPO462

Improving uptake and continuity of PITC services through on-the-job training in Kenya

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Objectives: To explore the experiences of HCWs in providing PITC services in Kenya.

Methods: A cross-sectional study of HCWs working in 46 government hospitals in Kenya.

Results: A total of 134 HCWs participated in the study. The majority of HCWs (74.1%) reported being trained in PITC. The most frequently cited barriers to providing PITC were: fear of stigma (45.3%), lack of adequate space (36.8%), and lack of resources (30.8%). The most frequently cited facilitators were: training on PITC (68.1%), strong institutional support (52.9%), and community support (47.7%).

Conclusions: The findings suggest that improving training and enhancing support could improve the uptake and continuity of PITC services in Kenya.

MOPO463

Challenges of scaling up provider-initiated testing and counselling (PITC) as part of “standard of care” in Tanzania

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Objectives: To assess the challenges faced by HCWs in scaling up PITC in Tanzania.

Methods: A qualitative study using in-depth interviews with HCWs.

Results: HCWs reported facing challenges such as lack of space, lack of resources, and lack of support from colleagues and supervisors. HCWs also reported feeling pressure to meet targets for PITC and to provide services to a large number of clients.

Conclusions: The findings suggest that addressing these challenges is crucial for scaling up PITC in Tanzania.

MOPO464

Outreach HIV testing in industrialised countries: a review of the literature

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Objectives: To review the literature on outreach HIV testing in industrialised countries.

Methods: A systematic review of literature was conducted using PubMed, Embase, and CINAHL databases.

Results: A total of 25 studies were included in the review. The majority of studies were conducted in the UK and the USA. The most common type of outreach testing was in prison settings, followed by testing in homeless populations and in prisons. The majority of studies reported high uptake of testing.

Conclusions: Outreach HIV testing is an effective way to increase HIV testing rates in industrialised countries.

MOPO465

Managing the practicalities of advice-giving against the backdrop of competing paradigms that frame voluntary counselling and testing

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Objectives: To explore the practicalities of advice-giving against the backdrop of competing paradigms that frame voluntary counselling and testing.

Methods: A qualitative study using in-depth interviews with HCWs.

Results: HCWs reported facing challenges such as time constraints, lack of resources, and lack of support from colleagues and supervisors.

Conclusions: The findings suggest that addressing these challenges is crucial for managing the practicalities of advice-giving in the context of HIV testing.

MOPO466

Health care worker knowledge, attitudes, and perception of provider-initiated HIV testing and counselling (PITC) services at public health sector facilities in Zimbabwe

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Objectives: To explore the knowledge, attitudes, and perception of HCWs regarding PITC services in Zimbabwe.

Methods: A cross-sectional study of HCWs working in public sector facilities in Zimbabwe.

Results: A total of 300 HCWs participated in the study. The majority of HCWs (80%) reported having received training in PITC. The most frequently cited barriers to providing PITC were: fear of stigma (45%), lack of adequate space (36%), and lack of resources (30%). The most frequently cited facilitators were: training on PITC (68%), strong institutional support (52%), and community support (47%).

Conclusions: The findings suggest that improving training and enhancing support could improve the uptake and continuity of PITC services in Zimbabwe.

Abstract Book Volume 1 | www.aids2010.org
MOPE0467
Impact of provider initiated testing and counseling in India: increase in utilization of VCT services and HIV case detection

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Background: The national HIV voluntary counseling and testing (VCT) programme in India was initiated at 3 hospitals in 1997, and by 2006 VCT services were available at 4,527 centres across the country. Despite this impressive scale-up utilization of VCT services remained low and a minority of the estimated 2.3 million persons living with HIV was aware of their sero-status. In 2007, the National AIDS Control Organization (NACO) initiated provider initiated testing and counseling (PITC) for all persons presenting to health facilities with tuberculosis, sexually transmitted infections, or clinical signs and symptoms suggestive of HIV. We analyzed the impact of PITC on utilization of VCT services and HIV detection in India.

Methods: Data were abstracted from the Computerized Management and Information System (CMIS) of NACO to analyze the number of persons tested and detected HIV in the national programme, stratified by the method of referral to VCT services (provider vs. client initiated).

Results: In 2007, 3,202,909 persons were tested in the VCT programme, of whom 1,476,769 (46%) were referred by a health provider. After implementation of PITC guidelines, the number tested and the percent referred by health providers (PITC clients) significantly increased to 7,588,069 and 60% (p < 0.001) in 2009. In this time, PITC clients comprised a significantly larger proportion of those detected HIV+. From 39% in 2007 to 54% in 2009 (p < 0.001). Between 2007 and 2009, 792,785 persons were diagnosed with HIV through the national program. PITC clients, most of whom would not have accessed VCT services on their own, accounted for 380,537 (48%) of these new case detections.

Conclusions: The routine implementation of PITC in key patient populations in health facilities has resulted in significant increases in utilization of VCT services and detection of HIV+ persons in India.

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MOPE0468
Analysis of the barriers to access HIV testing in rural areas of the province of Buenos Aires

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Background: The project aims to identify and analyze barriers and facilitators to access and use of pre test counseling. A comparative analysis was performed between people who had pre- and post- test counseling and those who only had post-test counseling.

Methods: The research includes quantitative and qualitative stages. For the quantitative part secondary data was used: previous studies and the data base of the service of Infectious Diseases of Hospital Juan A. Fernandez. For the exploratory-descriptive qualitative data, 30 semi-structured interviews were used.

Results: The database indicated that 64% (488) of the people do not know their HIV status because they do not come back for the results. Most people do not come back for the results due to “fear”. There are more cases recorded of people being tested due to medical prescription (756) than of people testing voluntarily for HIV (233). Staff morale had increased through counseling more HIV negative clients. Furthermore, we will map areas where very few clients have been accessed.

Conclusions: The reasons why results are not picked up are: lack of access to the results, fear of lack of confidentiality, fear of discrimination. Factors supporting pre-test counseling: getting information, knowing the types of results that one may get, being prepared to receive the news, identifying risk factors and including understanding the importance of informed consent. Pre-test interviews are important for primary and secondary prevention, as they are a fast tool to prepare people for a positive result and to reduce the impact and the traumatic effect of the result.

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MOPE0469
Clients’ knowledge, attitudes and perceptions of provider-initiated testing and counseling services at public sector health facilities in Zimbabwe

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Background: In 2007, the Zimbabwean Government introduced provider-initiated testing and counseling (PITC) in health facilities to increase early detection and improve timely referrals for HIV-infected individuals. An evaluation of the program was conducted in January 2010, which included an assessment of clients’ knowledge, attitudes and perceptions of PITC.

Methods: Sixteen health facilities were purposively selected, including tertiary referral hospitals (n=2), provincial (n=2) and district (n=6) hospitals, and primary health care facilities (rural, n=1; urban, n=5). A total of 36 clients were interviewed using semi-structured questionnaires with between one and four clients (mean = 2) per health facility. Transcripts of tape-recorded responses and interview notes were analyzed using framework analysis.

Results: Age range of interviewees was 19-73 years; 92% were female. A total of 34 (94%) clients accepted HIV testing and 29% of these clients tested HIV-positive. All clients were supportive of PITC; none regretted their decision. Majority of clients had previously considered testing and PITC provided them an opportunity to opt-in. Primary motivations for testing included concerns about their own HIV-status and their family health, expectations to access treatment, concerns about transmitting HIV to their infants and previously high-risk sexual behavior. Most clients stated their intent to disclose their results to a relative/spouse and were not concerned about stigma. While quality of PITC was perceived as good, one client was concerned about breach of confidentiality. Most interviewees did not participate in group education sessions, but were counseled individually by nurses or primary counselors prior to testing. Interviewees had limited information about non-treatment related post-test support services.

Conclusions: Access to treatment and PMTCT services were the main motivations for accepting HIV testing offered through PITC. HIV-related stigma was not reported as a barrier to uptake. The findings will be used to prepare health workers and improve the quality of PITC services.

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MOPE0470
UCZ Mwandi Mission Hospital VCT strategy for hard-to-reach at-risk populations

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Issue: Mwandi Mission Hospital is a level-one hospital found in the remote Western Province of Zambia along the Zambezi River. The catchment area has a population of 22,205. Livelihoods are maintained through subsistence farming, cattle herding and small-scale fishing. During the rainy season much of the area floods, requiring water transport. HIV prevalence in the catchment areas is 19.26% with 4,277 in need of HIV testing and related services.

In 2007, the hospital initiated the ART program with the assistance of AIDS Relief. Initial VCT strategy focused on opt-out testing and VCT numbers initially increased primarily from hospital referrals, then rapidly dropped off. Few were voluntarily coming to the hospital for testing, the hard-to-reach, at-risk populations were a priority. A total of 36 clients were interviewed using semi-structured questionnaires. Transcripts of tape-recorded responses and interview notes were analyzed using framework analysis.

Results: Age range of interviewees was 19-73 years; 92% were female. A total of 34 (94%) clients accepted HIV testing and 29% of these clients tested HIV-positive. All clients were supportive of PITC; none regretted their decision. Majority of clients had previously considered testing and PITC provided them an opportunity to opt-in. Primary motivations for testing included concerns about their own HIV-status and their family health, expectations to access treatment, concerns about transmitting HIV to their infants and previously high-risk sexual behavior. Most clients stated their intent to disclose their results to a relative/spouse and were not concerned about stigma. While quality of PITC was perceived as good, one client was concerned about breach of confidentiality. Most interviewees did not participate in group education sessions, but were counseled individually by nurses or primary counselors prior to testing. Interviewees had limited information about non-treatment related post-test support services.

Conclusions: Access to treatment and PMTCT services were the main motivations for accepting HIV testing offered through PITC. HIV-related stigma was not reported as a barrier to uptake. The findings will be used to prepare health workers and improve the quality of PITC services.

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MOPE0471 Knowledge of positive HIV status associated with increased consistent condom usage among married but not unmarried Africans

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Background: Few studies have examined consistent condom usage (CCU) and its relation to HIV status. Demographic and Health Surveys (DHS) now ask about consistent condom usage with last three partners in past year and also test respondents' HIV status. To our knowledge, these data have not yet been analyzed and reported.

Methods: Using DHS data, we analyzed CCU and "believed HIV status" (based on HIV status and whether a respondent had ever received the result of an HIV test), for 15,156 men and 19,750 women in Cote d'Ivoire, Tanzania, Swaziland, and Zambia, across various sociodemographic characteristics, including being married or in union.

Results: About 15% of men, those not in union, decreased by age, and increased with wealth and education. In Swaziland, Tanzania, and Zambia, men and women in unions were significantly more likely to report CCU if they believed themselves to be HIV-positive than if they did not know their status. CCU was highest in Swaziland, but in no other country did CCU exceed 17% among those in union who believed themselves to be HIV+. For those not in union, only Ivorian and Zambian women were more likely to report CCU if they believed themselves to be HIV+. Only Swazi women were less likely to report CCU if they believed themselves to be HIV+. For the 63% to 85% of these populations not knowing their HIV status, CCU among those in union ranged from 1% of Ivorian women to 15% of Swazi men, and among those not in union from 20% of Ivorian women to 48% of Swazi men.

Conclusions: Knowing one's HIV status is not consistently associated with higher CCU except among those in unions, a group for whom CCU remains relatively uncommon regardless. This suggests that HIV testing has limited effectiveness for increasing population-wide condom use Africa.

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MOPE0472 High rates of HIV testing but low utilization of joint testing opportunities among couples in rural Northern Tanzania: challenges in promoting a couples testing model

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Background: Couples testing has been shown to be an important means of HIV prevention in Africa, but little is known about couples’ testing behavior.

Methods: As part of a study to determine the impact of mobile voluntary counseling and testing (MVCT) campaigns on rural village-level testing, 98 couples residing within randomly selected households in 4 villages in northern Tanzania were interviewed individually at 0, 3, and 6 months; village-based MVCT was offered two weeks after the first and second interviews. Bivariate analysis was used to compare characteristics of testing and disclosure amongst members of couples.

Results: Both members of couples had previously tested in 49 couples, neither member in 24 couples, the female partner only in 20 couples, and the male partner only in 5 couples; one couple was known to be serodiscordant. During the study period, 75 (38.2%) of 196 individuals tested either at MVCT (58, 29.6%) or elsewhere (17, 8.7%). Twenty-two (29.3%) were first-time testers, 19 of whom presented to MVCT. Among men who were less likely than women to have previously tested (OR 0.51, p=0.04) and more likely to present as first-time testers (OR 2.7, p=0.06). Both members of 19 couples tested during the study period; only one couple tested together. After six months, 77 individuals remained untested and 44 lacked complete follow-up data. There was a trend towards more women (33 [58.9%] of 40) than men (23 [41.7%]) of 55 reporting disclosure to their partners (OR 2.5, p=0.09); few serodiscordant couples reported the intention of disclosure by test result. Perceived stigma, behavioral risks, and sociodemographics were not predictive of test result during the study period.

Conclusions: Despite impressive uptake of MVCT, testing separately and relatively low rates of disclosure were common among these couples. Testing strategies that promote couples counseling remain an important and elusive goal.

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MOPE0473 Scaling up HIV rapid testing in Ukraine: an evidence based approach

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Background: In Ukraine, about 30% of HIV infected individuals, estimated number 340,000, known their status. Previously, legislation limited broad use of HIV RDT. The goal was to compare results of two serial HIV RDT to the actual reference method in order to enable RDT scaling up and increase the referral to care in the population.

Methods: A prospective multi site study was designed in three drugs addiction centers and two TB clinics located in Dnipropetrovsk region. 1078 patients, 68% men, were recruited. After pre counseling and obtaining an informed consent, patients' capillary blood was tested with Abbott Determine and SD Bioine. Venous blood was collected and tested according to the national algorithm at the Regional AIDS center laboratory using 2 ELISA (Gen-screen Ultra HIV and ELISA- HIV EIA and one Western blot (WB – NEW LAV BLOT). Testing was kept blind through the study and data comparison was conducted by an independent expert. Discordant results and 7% of randomly selected samples were blindly re-tested in Gromashovsky Institute with RT1 and WB. Statistical analysis was performed using the SPSS for Windows 15th software. The project was implemented with Olana Franchuk ANTI AIDS Foundation financial support.

Results: 33% were newly identified HIV-positive, 78% men: IDUs compiled > 53%, TB patients - 65% of HIV+ reached AIDS facilities for services. Various algorithm characteristics were computed using point and 95% confidence interval estimates for a binomial proportion -- sensitivity: 97.43%; specificity 99.86%; PPV 99.71%, NPV 98.75%.

Conclusions: The data showed high sensitivity, specificity, PPV, NPV of the pilot algorithm. The results have allowed the Ukrainian MoH to adopt changes in legislation around RDT and enable broader use of HIV RDT in the country.

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MOPE0474 Ethical concerns and lack of preventive counselling when practicing opt-out HIV testing models in some African settings

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Background: Pre and post testing counselling is critical for proper handling of testing and to ensure effective HIV preventive efforts. HIV testing services have recently been scaled up substantially with a particular focus on provider initiated (opt-out) models. Increasing HIV test rates have been attributed to the rapid scale up of the opt-out strategy, but little has been documented on experiences of this new service strategy. The study aim was to compare the use of different types of HIV testing services to investigate perceptions and experiences at selected districts in Kenya, Tanzania and Zambia with a focus on counselling.

Methods: A mixed method approach using a concurrent triangulation design was applied. A population based survey was conducted among adults in the three districts, and qualitative data were obtained from 34 focus group discussions and 18 in-depth interviews. The data stem from an ongoing EU funded research project, “Response to Acountable priority setting for ‘Trust in health systems’ (REACT) in the three countries.

Results: The proportions ever tested for HIV differed sharply between districts and particularly for women (54% vs. 27% comparing extremes). Women were much more likely to be tested than men in districts that had scaled up prevention of mother-to-child transmission (PMTCT) programmes. Only minor gender differences appeared for VCT-related testing. In places where the opt-out strategy employed in PMTCT programmes has been rolled out extensively, testing was accompanied with very limited counselling with negligible of the preventive dimension. Furthermore, informants expressed the inability to opt-out.

Conclusions: Counselling efforts were experienced to be limited in the opt-out HIV testing model. This raises serious ethical concerns and represents missed preventive opportunities inherent in the counselling concept. There is an urgent need to reconsider the opt-out HIV testing models to protect client's autonomy and rights to access prevention.

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MPOE0475
Peer prevention and HIV testing: The ANRS-COM’TEST project, France - Training AIDS’ non-medical community actors (CA) to do rapid testing (with or without HIV treatment) and to follow-up intervention with men who have sex with men (MSM)

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Issues: For 25 years, AIDS, France’s largest community-based HIV associa-
tion, has been actively doing community level prevention. MSM most at risk expressed the need for more widely available and rapid HIV testing. An HIV test response was an experiment, incorporating HIV testing into prevention inter-
ventions targeting MSMs. It was necessary to show that CA were capable of conducting the screening process -legally a medical prerogative in France.

Description: Sixty volunteers were interviewed and followed a 6 day didactic and validating training course. Complementing basic training for all members of the association, it covered HIV and STI transmission (1 day), research pro-
tocol (1.5 days), motivational interviewing for pre- and post-test counseling (2 days) and practice of rapid testing on capillary blood (1.5 days).

The training was evaluated via an interview with a trainer, a self-reporting questionnaire and indirectly by ‘on-exit’ satisfaction questionnaires filled out by the training participants.

Lessons learned: Six CA (10%) could not or did not wish to participate in the action, following the training course; the others expressed high satisfaction of the acquired knowledge and the training, particularly in terms of its application in the field. The main apprehension before and during the training was announcing positive test results. This was not borne out by any particular difficulties for the ten positive (and confirmed) results: 342 people have been tested, 360 were very satisfied by the peer screening, 82% by the content of the counseling sessions and in particular risk taking and 84% by the way the results were announced.

All the CA are ready to integrate this new activity into their daily practice.

Next steps: The main results of the study and the acquired experience should contribute to recommendations to changing the law: allowing commu-

nity screening to become an everyday activity on the condition of having followed the tested training course.

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MPOE0476
HIV counselling and testing: the Burkina Faso experience involving community large scale campaigns in addition of community and public health facilities

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Background: In order to accelerate the reach of care-and-treatment Uni-
versal-Access objectives, it is crucial to enrol the highest possible number of PLWHA in an active file. Therefore it is necessary to scale-up Burkina Faso community-based testing (CT) efforts on both approaches: client initiated and routine health-provider-initiated. Today, among the 110.000 PLWH in coun-
try (prevalence of 1.9%), only half of them know their HIV status, one third are included in an active-file and less than a quarter (26.448 including 1.354 children) were aware of their HIV status as a result of attending a VCT centre, the Ministry of Health has been advised to establish more centers throughout the island and to embark on a more intensive programme to encourage sexually active people to be tested.

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MPOE0477
Circumstances that led to a diagnostic HIV test in a Caribbean Island: Medical Research Foundation, Trinidad and Tobago

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Background: Almost 30 years after AIDS was first recognized, with the ad-

vent of rapid testing, antiretroviral, voluntary counseling and testing (VCT) and educational programmes, it is hoped that having an HIV test would be more active and not reactive. This study identified the reasons for patients hav-
ing an HIV test before attending our treatment centre.

Methods: From April 2002 to December 2009, of 5310 patients, 2464 (46%) were asked to identify the circumstances that led to their positive HIV test, at first entry into the clinic.

Results: Of the 2464 patients, 1189 (48%) were males, 1275 (52%) fe-
males; heterosexuals 2229 (90%), bisexuales 128 (5%) and homosexuals 107 (5%). Patients were classified into two groups based on their CD4 counts at entry. Of these, 978 (40%) had CD4 counts ≤200 cells/mm³ and 1486 (60%) had CD4 counts >200cells/mm³.

Reason for HIV test

<table>
<thead>
<tr>
<th>CD4 ≤ 200cells/mm³</th>
<th>CD4 &gt; 200cells/mm³</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness</td>
<td>668 (68%)</td>
<td>383 (26%)</td>
</tr>
<tr>
<td>Pregnancy</td>
<td>48 (5%)</td>
<td>287 (19%)</td>
</tr>
<tr>
<td>VCT</td>
<td>91 (9%)</td>
<td>331 (22%)</td>
</tr>
<tr>
<td>Partner’s HIV status</td>
<td>129 (13%)</td>
<td>377 (25%)</td>
</tr>
<tr>
<td>Other</td>
<td>43 (5%)</td>
<td>107 (8%)</td>
</tr>
</tbody>
</table>

(Reason for HIV test)

The other reasons for HIV testing were seeking visas 15 (0.6%), employ-
ment 28 (1%), and insurance 38 (1.5%).Additional reasons were drug reha-
bilitation 19 (0.7%), rape 9 (0.3%), imprisonment 7 (0.2%), blood donor 16 (0.6%), HIV+ child 18 (0.7%).

Conclusions: As many as 978 (40%) were late presenters (CD4 count ≤200 cells/mm³) and because only 7% of these patients became aware of their HIV status as a result of attending a VCT centre, the Ministry of Health has been advised to establish more centers throughout the island and to embark on a more intensive programme to encourage sexually active people to be tested.

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MPOE0478
HIV counselling and rapid test in a primary health care service - São Paulo, Brazil

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Issues: Primary Health Care Services (PHCS) are responsible for providing care to population living in their catchment area as their first contact to the public health system in Brazil. The implementation of HIV rapid test in PHCS as a point of care allows health care providers that could reduce HIV vulnerabil-

ity. Moreover this action may provide opportunity to the general population of test HIV infection early diagnosis. The aim of this study is to describe the implan-
tation of HIV testing and counseling integrated in a PHCS.

Description: This intervention has been conducted in 3 PHCS located in the center of São Paulo-Brazil. The team has been constituted by PHCS profes-
sionals previously trained to perform counseling and HIV rapid test. An edu-
cational group was organized aiming to inform the patients who were in PHCS facilities or communities. After the groups it was offered individual counseling, of them 189 (23%) were tested, 85 men and 97 women requested the rapid test for HIV. Of the individuals who underwent the examination, 8 (4.3%) were positive for HIV test, we found a median count of CD4 lym-
phocyte of 777 (480-854). 7 cases are part of the general population.

Lessons learned: The educational groups in the general population were important to identify situations of vulnerability. It was observed that the ma-

jority of tests performed on men were done outside the clinic during activities in the community. We identified a high number of HIV-positive persons as well as a high median of CD4 lymphocyte count at the diagnosis showing the strength of this intervention.

Next steps: It is possible to incorporate the HIV counselling and rapid test in daily routine of Primary Health Care Services.

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MPOE0479
Integrated HCT at local primary health care centres promote access of rural dwellers to HIV services

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Issues: HIV Counseling and Testing (HCT) is an entry point to HIV/AIDS ser-

vices. Only people in the urban areas like Ilesa, osogbo, Ile in western part of Nigeria have prompt access to HCT. Community members in rural areas such as Ijebu-Jesa, Ijeda, Iboiken and Iloko of western part of Nigeria have a very poor access to HCT.

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MOPE0480

Lack of access to HIV-test results in population groups most-at-risk for HIV, Southwest China

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Objectives: To assess counselling and testing practices provided to most-at-risk population in Southwest China.

Methodology: Between March and August 2006, drug users (DUs) and female sex workers (FSWs) in five highly affected prefectures of Yunnan Province (i.e. with HIV- prevalence among IDU higher than 10%) were interviewed and tested for HIV.

Results: In total, 1065 FSWs and 685 DUs (including 81% of DUs injecting) participated. HIV-prevalence was 2% in FSWs and 32% in DUs surveyed. 47% of FSWs and 67% of DUs reported knowing where HIV-testing is offered. 42% of FSWs and 58% of DUs reported to have received HIV-testing. Most of those tested (96% of FSWs and 82% of DUs) had their last HIV-test less than 3 years ago. Testing occurred voluntarily in 75% of FSWs and in 53% of DUs. HIV-test result was available to only 63% of FSWs and 39% of DUs with HIV-test experience. Counselling for HIV was reported by 60% and 66% of them respectively.

Conclusion: Lack of access to HIV-test results remains a major obstacle to increase coverage of prevention, treatment and care services for most-at-risk population, particularly for DUs. One out of five DUs with HIV-test experience received counselling but no results.

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MOPE0481

Streamlined group HIV rapid testing reduces stigma

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Issue: It is believed many people do not get HIV testing because of stigma. This is important regarding public health concerns of increasing HIV transmission. Of the estimated 33 million people infected half do not know their status. In order to find these people and get them into care we would need to test at least 1 billion people.

Description: AIDS Healthcare Foundation (AHF) developed a testing model of streamlined group pre-test counselling, with shorter post test counselling time. Referrals were given to treatment centers for HIV-positives. We were able to test over 1000 people in one day using our model. This was achieved with mobilization of large community areas with bill board advertisements, radio and newspaper announcements for testing days.

Lessons learned: During the extended World AIDS Day 2009, AHF and partners tested over 4 million people. Long lines of people showed up at HIV testing sites without fear of being seen. Parades of marching bands lead thousands of people to testing sites in Latin America, Africa and Eastern Europe.

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MOPE0487
Making sweethearts safe: increasing condom use among high risk urban men and their partners in Cambodia
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Issues: Sharp declines in HIV prevalence among brothel-based sex workers were achieved by high levels of consistent condom use in brothels. Recently commercial sex has shifted out of brothels into entertainment establishments (EE), such as karaoke bars and beer gardens. This shift has made it more difficult to reach sex workers, while contributing to an increase in high risk sexual relationships known as “sweetheart” relationships. These sexual encounters may be transactional and are characterized by an element of affection and trust resulting in lower rates of condom use. Prevention efforts in Cambodia have historically not focused on the male role in HIV transmission.
Description: Multiple rounds of quantitative research informed Interpersonal Communications (IPC) campaigns targeting high risk urban men (HRUM). IPC activities began in Phnom Penh in 2008 and then expanded to three additional urban areas. IPC sessions take place in the EE venues where men socialize and decisions are often made about seeking sex. Sessions are conducted by trained Interpersonal Communicators using innovative, interactive games and tools designed to engage groups of HRUM and address determinants of condom use. Outdoor media and posters deliver complementary messages. IPC teams reached over 225,000 men throughout the 18 month campaign. Behavioral surveys among HRUM indicate a statistically significant increase in consistent condom use with sweethearts, from 57.7% in 2008 to 69.4% in 2009. Consistent condom use with sex workers increased from 84.7% to 95% during the same period.
Lessons learned: Targeted, evidence-based IPC campaigns are effective in improving behaviors in Cambodia. Increasing frequency of IPC visits and exposure to interventions improved condom use. Intensive advocacy with local authorities and EE owners reduces barriers to implementation.
Next steps: Increase frequency of reach to high risk urban men. Use evaluation tools to continually monitor changes in behavior and behavioral determinants and tailor messages.
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MOPE0488
Reducing barriers and improving access to HIV prevention services among FSW in Kingston, Jamaica
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Issues: Sex work remains illegal in Jamaica. Female sex workers are a highly mobile heterogeneous group that are often victims of discrimination and violence. These factors along with absence of legislation perpetuate their status as social outcasts and impacts health seeking behavior. Notwithstanding the dynamics of the population HIV prevalence rate among FSW in Jamaica has remained at 9% since 2005. This presentation reflects the strategy to increase sustained reach to FSW with prevention services.
Description: Site based rapid voluntary counseling and testing at bars, exotic clubs, massage parlors and streets were conducted. Approximately 300 sex workers in the metropolis of Kingston and St. Andrew were reached. Outreach workers conducted weekly site visits over six months. The intervention achieved a testing rate of 90% and self reported condom use increased by 30%. Referrals were made for STI screening and treatment. Sex workers, patrons and clients were engaged in risk reduction conversations, condom skills building activities, condoms and lubricants distribution. Repeat site visits built the trust of sex workers, staff, club operators and patrons. This resulted in little resistance to the intervention. The relationship built with the population provided a unique opportunity to understand the dynamics of sex work, increase access to prevention services and unearth factors that drive risky behaviour.
Lessons learned: Sex workers willingly accessed site based services due to the elimination of long waiting periods. They were receptive to outreach workers and encouraged by interest in their welfare. Social vulnerability issues of FSW need to be addressed. Over 70% are illiterate; many are undocumented further isolating them and reducing opportunity for social mobility and access to social services.
Next steps: Programmes are being developed to address social vulnerability. Empowerment workshops, life skills training, and linkages into social security systems are priority areas. A series of empowerment workshops is currently being implemented.
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MOPE0485
Participatory competence assessment and grading of comprehensive workplace policies and programs in Coast and Rift Valley provinces, Kenya
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Issues: HIV/AIDS has become a workplace issue as its effects weaken staff performance and organizational productivity. Without clear procedures, issues such as stigma, discrimination, and high staff turnover exacerbate an organization’s ability to function effectively. With this realization, many public and private sector organizations in Kenya have embraced the need for comprehensive workplace policies and programs.
Description: The National Organization of Peer Educators (NOPE) has, together with its partners in the AIDS, Population and Health Integrated Assistance project, developed a strategy for the implementation of comprehensive workplace HIV/AIDS policies and programs. The strategy was informed by an institutional capacity assessment, which was conducted at 62 workplaces in the 2 provinces. This approach is being replicated in 40 new workplaces under PEPPAR’s New Partners Initiative. The strategy consists of an action framework for developing comprehensive workplace HIV/AIDS programs. Workplaces use a tool to assess their existing policies and approaches and grade themselves on a four-tiered scale: Platinum, Gold, Silver and Start-up. To date, NOPE has facilitated self-assessments and provided systematic technical assistance to 114 workplaces of 200 targeted.
Lessons learned: Self-assessment enables organizations to take ownership of their programs and work towards making them more comprehensive. Gaps in policy and program implementation identified through self-assessment should be used in modifying and developing programs. The four-tiered system enables organization staff to participate in the self-assessment process, while involvement of chief executives in the certification process increases organization-wide support and commitment.
Next steps: NOPE provides systematic technical assistance to workplaces on an ongoing basis. Workplaces will conduct follow-up, participatory self-assessments 1 year after the initial assessment to determine how successful each workplace has been in developing and implementing effective HIV/AIDS workplace programs.
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MOPE0486
Comprehensive approach to the prevention of mother-to-child transmission of HIV in Russian regions: implementation and lessons learned
E. Demchenko
AIDS Foundation East-West, Client Management Project, Moscow, Russian Federation
Issues: Prevention of mother-to-child HIV transmission (PMTCT) was initially viewed in Russia as a purely medical issue. However, high mother-to-child transmission rates (8.19%) demonstrated the need for other - social and psychological - approaches that could have a significant input tackling the transmission rates (8.19%) demonstrated the need for other - social and psychological - approaches that could have a significant input tackling the transmission rates. Presenting author email: elena_demchenko@afew.org

Combination prevention programmes
MOPE0485-MOPE0500
Track D > Social and Behavioural Sciences
Factors affecting uptake of male circumcision as an HIV prevention strategy among youths

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Background: The increasing number of youths being infected by HIV in the country demands that society develops mechanisms to not only protect them but also reduce their vulnerability to ill health and early death. The UNAIDS 2009 report that one of the key drivers of the HIV epidemic in Zambia is the low levels of male circumcision rates among youths. To determine knowledge levels, attitude and practices of male youths towards male circumcision in the selected communities in Zambia, SAFAIDS conducted a baseline study in 2009.

Methods: A systematic exploratory study was adopted. Data was collected using both qualitative and quantitative tools. The study was conducted in two provinces of the nine provinces of Zambia namely Copperbelt and North Western. 250 respondents were interviewed. Study population included traditional leaders, community leaders, and representatives in HIV programmes who were involved in information dissemination or implementation of male circumcision advocacy. Data was entered in EPIDATA, a computerised software, and analysed with SPSS/Ida statistical tests which were performed on certain variables.

Results:

- Overall knowledge levels on whether medical male circumcision can prevent transmission of HIV/STDs are low amongst all respondents.
- Only 37.9% of the youths reported that they had adequate information about medical male circumcision.
- Unavailability of health facilities conducting male circumcision in most communities has affected utilization of male circumcision services among the youths.

Conclusions: Findings have clearly shown that even though medical male circumcision has shown to reduce men’s risk of becoming infected with HIV through heterosexual sex, few Zambians know about this information. There is need to provide the young people, in particular young men with adequate information on the benefits, and risks related to medical male circumcision.

Based on these findings, SAFAIDS is developing an information/advocacy project which will disseminate information on male circumcision through peer education, community radio and information materials dissemination.

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**MOPE0494**

The Peruvian Positive Communities Trial - methodological overview and baseline data

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**Background:** Factors such as poverty, marginalization, and homophobia/transphobia, in combination to contribute to the high HIV burden in Peru; higher than in any cities globally. As a result, they contribute to the disease mostly by men who have sex with men (MSM) and transgender persons in Peru. More comprehensive interventions targeting sexual behaviors of the epidemic, rather than focusing on individual-level variables, should be tested for prevention purposes.

**Methods:** A 2x2 factorial cluster randomized control trial, aimed to evaluate the effects of two interventions (structural and biomedical) to reduce sexual risk behavior and incident STIs among currently ongoing in 24 lower-income neighborhoods in Lima. Men aged 18 - 45, self-identified as gay/homo/bisexual or transgender, reporting at least one sexual encounter with another man in the past 12 months, were included. Interventions tested were:

1. Positive Communities (PC), including leadership training and the creation of community centers,
2. Enhanced Partner Treatment (EPT) of curable STIs, including health promotion and education.

**Study endpoints include:**

- Any-STI-aggregate Incidence rate (Laboratory-confirmed HIV, HSV-2, Syphilis, Chlamydia and/or Gonorrhea), and
- Proportion of individuals reporting unprotected intercourse with a non-primary partner in last six months.

In addition to the baseline assessment, two follow-up visits will be conduct.

**Results:** 718 individuals were enrolled in 2008 (Age: median=29, range=18-45), Self-identified as Gay/Homosexual=65% and transgender=29%. 59% were not able to satisfy their basic economic needs in the last 12 months. Baseline STI prevalence was: HIV, 20%; HSV-2, 56%; Rectal Chlamydia, 10%; Rectal Gonorrhea, 10% and chronic Syphilis, 25%. Overall Unprotected anal sex in last 6 months was reported by 62%.

**Conclusions:** The study population shows high prevalence of HIV/STI and high risk sexual practices in a context of poverty and social exclusion. The trial is expected to be completed in mid 2011 and its findings will provide important insights for social change and rights-based HIV interventions with highly vulnerable populations.

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**MOPE0495**

Change agents: high school students at their best to save youth on the streets in Pakistan

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**Issues:** Pakistan with a population over 167 million, is the 6th most populated in the world and 2nd among the Muslim countries. Largest majority of the population consists of youth under (71 million). Presently more than 8 million children are working as child labor mainly in hazardous conditions. A very large number of these children are on the street of big cities without any proper care and education, vulnerable to severe threat of sexual abuse. These street children and/or their families are affected by conflicts (Afghanistan/Pakistan), earthquakes, or severe poverty compelling for migration.

**Description:** GIDSAPH has started a project for engaging the uneducated students (age 10 - 15) through the high school youth (age 15-18) to guide these street children on their health and protection needs. First time contact on the streets is the third by their peers in the schools. Five high schools, with the help of GIDSAPH have formed “Youth-4-Change” groups to outreach to the street kids. Each of Youth-4-Change group is first trained by GIDSAPH on important issues of child health, child abuse, drug abuse, violence and sexual abuse, and equipped with life-skills like effective communication, leadership and making networks. Youth-4-Change goes out once a week to different urban areas on rotation where street-kids are begging, polishing shoes, selling drugs, or just roaming around. They sit with them and offer something to eat with them and then start communication with them. Hence, after taking them into confidence educate them on how to keep themselves safe from exploitation and sexual abuse. Once convinced these children and sent to the “homeless” home” established by the Social Welfare Department of Edhi Foundation.

**Lessons learned:** Youth-to-Youth education is a successful strategy. High school students are mobilized and trained themselves first and then preach.

Next steps: Govt and donor organizations need to develop projects to sustain youth-to-youth communication.

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**MOPE0496**

Terrence Higgins Trust young leaders programme: engaging hard to reach young people in HIV prevention through peer leadership

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**Issues:** Research shows young people in UK ranked HIV infection as their lowest sexual health concern. They cite a disassociation with both education and clinical services, and see school based education as too little, too late and too biological.

**Description:** After a national consultation and in partnership with young people, THF developed the Young Leaders Project. The project recruited young people to manage their own local HIV and sex education service. With emphasis on need, young people most at risk of HIV infection and poor sexual health (who often disengage) were actively targeted. Personal development and peer leadership were key tools in engaging young people, particularly the socially disadvantaged. In three years 280 young people were trained and accredited to manage their own service, with 35,000 young people directly benefiting from the award winning service.

**Lessons learned:**

- The direct involvement of young people disproportionately affected by poor sexual health and HIV was central to the success of the project.
- Active, targeted recruitment increased participation of harder to reach groups including BME (20% of participants), those who had disengaged from education (15%) and LGBT (15%) young people.
- Focus on building aspirations had a particularly strong appeal to young men, a third of our accredited people.
- Involvement of HIV-positive affected/infected youth strengthened project outcomes.
- Approaching disease prevention best done within a broader spectrum of learning and personal development.
- Participation of young people in all elements was crucial.
- Peer leadership best engaged young people from all demographics and mixing up their different backgrounds broke down barriers.

**Next steps:** Project evaluation underway to help develop models of participative work around HIV and sexual health for young people. Continued focus on training young people who can disengage from traditional models of education into the fold, to the benefit of all participants.

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**MOPE0497**

Enhancement of women and girls reproductive rights in Ethiopia

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**Issues:** Female students in universities in Ethiopia face challenges that pose a risk to graduating due to economic problems, especially for rural students, sexual harassment and lack of sufficient knowledge on sexual and reproductive health (SRHR) including HIV. Consequences are unintended pregnancies and abortion. The university social support system is weak, there is little guidance for students who struggle with the new academic and social environment. The often unsafe environment on university campuses, like dormitories locations make female students vulnerable to violence.

**Description:** The YWCA of Ethiopia started the ‘Enhancement of Women and Girls Reproductive Rights in Ethiopia’ in two Addis Ababa universities. To address the economic challenges that cause female students to engage in paid sex with older men, an empowerment scheme was developed that offers 100 underprivileged students a monthly stipend of Birr 105 (approximately USD 9) to buy sanitary towels, necessities including books. Students receive mentoring and trainings on SRHR, HIV/AIDS, leadership and human rights. In partnership with Okt Ethiopia, a kiosk was installed at the Addis Ababa University next to the female dormitory, to provide young women with SRHR information and services. The location encourages students to use the service without shame and facilitates access to contraceptives such as condoms, the contraceptive pill and sanitary pads.

**Lessons learned:** Without economic support many young women do not complete university

Life skills, information, SRHR services and leadership mentoring enables them to deal with life challenges

It is necessary for sustainability to build the governance of the university leadership.

Building young women’s capacity through education and creating healthy citizens whose SRHR are safeguarded is a path to development.

**Next steps:** Programme will be replicated in other universities in Ethiopia.

Adaptation is underway in Uganda and possibly Sierra Leone.

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MOPE0498
Over the rainbow and under the radar: HIV/AIDS prevention education model for non-accessible inner-city LGBTQ youth of color in Oakland, California

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Issues: Oakland, California 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. Oakland's regional municipality, Alameda County continues to declare a State of Emergency on their HIV/AIDS Crisis with nearly half of all new diagnoses being African American gay males between the ages of 18-25. This has been a national phenomenon within this demographic in America's Inner-cities and has grave impacts on not only the lives of these youth but the lives of their families and their larger communities. The inner-city LGBTQ youth of color community is also one of most indigent, transient and non-accessible communities to reach in the HIV/AIDS prevention movement in the United States.

Description: The Sexual Minority Alliance of Alameda County (SMAAC) Youth Center was founded in 1998 in response to the original declaration of Alameda County's State of Emergency. The mission of SMAAC is a trailblazer in HIV prevention education for LGBTQ 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 in their target population. Within the HIV/AIDS prevention movement, SMAAC has provided the cultural translation and tailoring of the Botvin Life Skills and Mpowerment Evidence-Based Interventions successfully for their youth population.

Next steps: SMAAC is developing a toolkit to make our best practices and lessons learned available to other organizations and grassroots groups that would like to develop programming for inner-city LGBTQ youth of color. This presentation will elaborate on the lessons learned.

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MOPE0499
Integrated program approach for effective HIV prevention: HIV and AIDS Program, Save the Children in Papua New Guinea

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Issues: Papua New Guinea is experiencing a growing generalized HIV epidemic with national HIV prevalence for adults currently estimated at 2.0% - the highest in the Pacific region. The epidemic is fuelled by multiple sexual partnering, low condom use and limited access to STI and VCT services. Youth, female sex workers and men who have sex with men are considered the most vulnerable populations in the context of PNG’s HIV epidemic.

Description: Save the Children in PNG’s HIV and AIDS Program implements four projects that promote HIV prevention, treatment, care and mitigation. Two projects are peer-mediated interventions, targeting out-of-school youth, and female sex workers and men who have sex with other men. A third project provides support to communities at settings where risk and vulnerability converge and the fourth project works with the health sector to increase coverage of ART and VCT.

Interventions: Botwin Life Skills and Mpowerment Evidence-Based Interventions were tailored for PNG’s cultural context.

Lessons learned: Working in an integrated programmatic approach has made the intervention more effective and efficient. The approach facilitates collaboration between projects, allowing lessons, approaches and resources to be shared to achieve greater efficiency and effectiveness and provide a strong basis for advocacy towards enhanced impact and sustainability. Strong links are made between community-based project staff and volunteers and clinic staff, creating opportunities for learning, strengthening services and removing barriers to access services.

Next steps/ recommendations: The HIV and AIDS Program must continue to support and strengthen each of its component projects and create opportunities for cross-project fertilization and staff learning. Opportunities to introduce peer-led services, are complementary and existing program components must also be considered.

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Behavior change communication (BCC) or communication for behavioural and social change aiming to change individual knowledge, attitudes, or behaviour (e.g. changed knowledge, risk perception, changed behaviour, health care seeking or adherence, sexual and reproductive health)

MOPE0500
The context of HIV testing and disclosure among patients on ART treatment in Mombasa, Kenya

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Background: In Kenya about 1.5 million people are living with HIV and four out of every five HIV-positive Kenyans are unaware of their status. About two-thirds of the country’s 37 million people have never been tested for HIV. The absence or poor quality of this qualitative study was to understand the reasons PLHA receiving ART provide for undertaking HIV testing and disclosing or not disclosing their status to their sexual partners.

Methods: Stratified purposive sampling was used to randomly select in-depth interview candidates. Twenty-three sexually active adults receiving ART (11 women and 12 men) were recruited from a larger ART adherence study. The median age of participants was 36 years (IQR 33-40). Content analysis was undertaken by two researchers using Atlas.ti 5.2 (Berlin, Germany). Results: A clear factor structure for testing and disclosure emerged suggesting that underlying health problems, risk sexual behavior, and death of partner or child triggered the need for a HIV test. Knowledge of a positive HIV test caused severe stress and compounded the respondent’s already compromised health. The decision to be tested was self-initiated due to death of a made unilaterally. Disclosure of HIV status to partners presented difficulties for both men and women. Anxiety about possible disregard of past risky behaviours, responsibility for bringing infection into the dyad and partner’s reaction influenced the respondents’ decision to disclose. Fearing of rejection by partners gave participants little advantage to disclose.

Conclusions: Reasons for disclosure or non-disclosure to sexual partners were varied and this data provides insights for secondary prevention for those living HIV and their sexual partners in view of KNAPS III target to increase current testing levels from 36% to 80% by 2013. More research is needed to better understand salient issues motivating individuals to test and disclose in this setting.

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MOPE0501
HIV/AIDS prevention work: an introduction of HLJ RC in China

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Issues: Since 2005, we have conducted HIV/AIDS intervention work in four fields, including MSM groups, PLHIV, university students, and the re-education-through-labor system, with the main form being peer education training.

Description: These activities covered sixteen MSM grass-roots organizations all over the province. 688 training meetings, including 388 training sessions for MSM groups, 107 training sessions in detention centers, and 126 training sessions in the universities. We have conducted exchange activities 244 times in different places, developed different entertainment activities 26 times, and visited PLHIV in hospitals and in families 60 times. Until now, plenty of useful experience has been provided as guides for the training. The training content had been designed mainly by the target groups and so on. The training sessions have been conducted by the grass-roots according to the requests. The leaders were from the target groups who had been selected and trained. Training school, teaching groups and supervision and evaluation system have been set up according to community requests. We have set up PLHIV organizations in five cities in Heilongjiang, and conducted care and loving activities for MSM groups, including knowledge training, PLHIV visitation in hospitals, help and support in economy, self-production and so on.

Lessons learned: From this project, we have learned that the target groups’ initiative and enthusiasm were the guarantees for the project.

Next steps: The aims of these activities were to respect equality to the sexual minority and the vulnerable groups, to improve the behavior changes of MSM groups, to eliminate the discrimination and stigma, and to restrain the spread of HIV/AIDS. We could continue developing the promotion activities.
mobilizations, educational activities among the target groups, to promote the knowledge and the conceptions on HIV/AIDS prevention.

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MOPEx052
Innovations in addressing communication gaps in HIV prevention research; experiences from a Lake Victoria fishing community

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Background: The HIV/AIDS epidemic has adversely affected fishing communities in Uganda where prevalence has been found to be 25-30% in communities on Lake Victoria. Innovative communication of HIV/AIDS prevention and research was undertaken in an ongoing HIV prevalence/incidence study in fishing communities.

Method: A general attitude and attitude study on existing HIV prevention methods and HIV prevention research was conducted. It was found that knowledge was limited among both women and men. Focus group discussions were held to feed into HIV prevention/research outreach. Games such as football, boat races were organized to provide messages to people who are not interested in the sessions. HIVisky dialogues were also held.

Results: Communication outreach has contributed to a greater understanding of HIV/AIDS prevention and HIV prevention research. This has contributed a volunteer retention rate of over 80% in the current study which a milestone is given their mobility. Support and trust for research teams has increased as shown in this anecdotal evidence. At least we now know you are concerned about our health situation, we can support HIV prevention research efforts. FGD participant from a fishing island.

Conclusions: Communicating HIV prevention research in a fishing community calls for utilization of appropriate, user-friendly methods. The innovations adopted by the study team showed that despite general low literacy levels, mobility, ongoing consistent messaging and rapport with the community can increase support for HIV prevention research.

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MOPEx053
A visual approach to treatment literacy

1NAM, London, United Kingdom, 2Terrance Higgins Trust, London, United Kingdom, 3Discovery, London, United Kingdom

Issues: A wide range of printed and electronic materials exist to support treatment literacy among people with HIV in the UK, but feedback told us that existing resources were not appropriate for all people with HIV.

We identified a need for innovative visual formats for treatment education materials that are appropriate for UK patients with low literacy, English as a second language, minimal prior understanding of HIV, or who are less comfortable with written information.

Description: The project was developed through close collaboration between a graphic designer, health educators and group of healthcare professionals who provide face-to-face treatments advice. Health professionals often use illustrations and simple analogies to explain complex health concepts. We developed an innovative way to communicate HIV themes through images.

We designed resources for use during a discussion between a healthcare professional and patient, rather than to be read privately. The role of sexual identity in HIV prevention

R.S. Lugo, A. Usher, A. Evans
1The Metro Centre, Peer Support Services, London, United Kingdom, 2The Metro Centre, London, United Kingdom

Issues: The presentation will address the following issues:

• Effective ways to measure outcomes in HIV prevention
• Rates of sero-conversion among MSM populations
• Creating clinical care pathways for HIV negative populations
• The benefits of narrow-focus, one-to-one interventions against broad, population-focused approaches
• Broadening the clinical remit to embrace holistic approaches to sexual health
• The role of sexual identity in HIV prevention

Lessons learned: Close collaboration with healthcare professionals and community organisations ensured the project’s success. Visual approaches have a strong appeal.

Next steps: Although the project was planned for UK audiences, requests to translate or adapt the materials have come from around the world. Leaflets are available in 19 languages. Because each leaflet has few words, translations are cost-effective.

Idiomatic leaves would be adapted to reflect local clinical practice and culture. But the high level of interest highlights the need for simpler, more visual treatment literacy materials in many countries.

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MOPEx054
The use of school clubs as promising interventions for HIV/AIDS prevention in school aged children

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Issues: It is estimated that there are 2million orphaned children in Uganda, half of the population is below 18years and quarter is of primary school going age 6-12. The high rate of HIV infection among children in Uganda has prompted both households and institutions to put in place structures that can sustainably address HIV/AIDS. Little Angel's primary school uses schools clubs to disseminate HIV/AIDS awareness messages. The club has a membership of 120 pupils 80F and 40M. The main objective of this club is to effectively equip children with life skills to enable them take good decision about their lives.

Description of intervention: The school club uses various interventions to address HIV/AIDS among children, drama, health, sports, visual aid and media to pass on information to the communities and fellow pupils.

• A total of 12 radio talks shows organized by pupils have been conducted to address HIV/AIDS to fellow children.
• Children have been linked to organizations that offer pediatric HIV/AIDS for testing and treatment with consent from their parents.
• A total of 5 Health spaces have been conducted per term; this is aimed at ensuring that children are physically healthy.
• The school has a talking compound with key messages on HIV/AIDS prevention, ie ‘SAY NO TO EARLY SEX’ this has been instrumental to behavioral change.

Formation of peer education sensitization.

Lessons learned: Life skills trainings which are part of the school clubs activities are critical in addressing stigma. Children learn more in interactive environments for example like drama, sports, radio talk show and visual aid.

Conclusions: Children may be easier to influence than adults, having not yet adopted set behavior patterns.

Next steps:

• Employ variety of visual aid to pass on HIV/AIDS messages.
• Scale up sensitization to other schools through exchange visits.

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MOPEx055
HIV prevention, identity and testing: effecting measurable changes of behaviour, attitudes, skills and knowledge in high risk MSM populations through the creation of 1) care pathways for HIV negative MSM, 2) identity, responsibility and ownership strengthening peer-led, one-to-one interventions, and 3) tools for measuring outcomes against criteria that gauge an individual’s sexual well-being and likelihood of sero-conversion

R.S. Lugo, A. Usher, A. Evans
1The Metro Centre, Peer Support Services, London, United Kingdom, 2The Metro Centre, London, United Kingdom

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• The role of sexual identity in HIV prevention

Lessons learned: The role of sexual identity in HIV prevention

Effective ways to measure outcomes in HIV prevention

Measurable outcomes are key successful, reactive interventions

Conclusions: The presentation will examine the success of this approach thus far as well as its implications for future developments within the field of HIV prevention.

Lessons learned:

• The 5-month intervention effectively changes participants’ BASK (16% change overall, 34% according to most improved BASK category).
• Links between clinics and community health interventions strengthen MSM identity
• Strong MSM identity reduces the likelihood of sero-conversion in high-risk MSM
• Measurable outcomes are key successful, reactive interventions

Next steps: The Metro Centre is currently piloting MetroSafe in Kiev and Odessa and among Heterosexual African and MSM minority communities in London. The BASK Inventory has been and continues to be adapted for use in other interventions.

Results will be published once a large enough test group has been established.

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that HIV can be spread through superstition and witchcraft associates with the sexual decision making of never-married men and women. Thus, we consider gender-specific models for never-married men and women.

Results: Results show that men who believed HIV can be transmitted through supernatural means were less likely to use condoms at last sexual intercourse, controlling for other theoretically relevant variables. Women with similar beliefs are more likely to have experienced sexual intercourse but less likely to have used condoms at last sex. For women however, the relationship between such superstitious beliefs and condom use at last sex is attenuated by ethnicity and region of residence.

Conclusions: These findings challenge the effectiveness of the biomedical paradigm and call for a critical examination of HIV prevention programs built on the assumption that individuals are aware that their own behaviors put them at risk of infection. In designing AIDS prevention programs in Africa, policy makers need to consider the African’s notion of disease causation, belief systems and the local context by examining the interplay between socioeconomic and cultural factors.

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MOPE0507
Mobile HIV counseling and testing removes barriers to testing among men who have sex with men in Togo

B. Capham, B.E. Pedersen


Issues: In Togo, stigma against men who have sex with men (MSM) and individuals who are HIV-positive impedes MSM from seeking medical services. A lack of health professionals trained to work with MSM and limited HIV testing facilities further restrict access, resulting in few MSM who know their HIV status. Description: PSI/Togo’s mobile HIV Counseling and Testing (CT) services for the gay community take advantage of activities such as a monthly film and discussion group at PSI’s center and private parties, to provide information, testing and counseling in a stigma-free environment. Trained peer educators create skills and discuss sexuality issues. Peer educators are responsible for recruiting and informing MSM about PSI’s services through text messaging or word of mouth in the community. An NGO with a longstanding relationship with MSM provides counselors who are known and trusted within the community. Lessons learned: Mobile HIV testing services 70 MSM in four days, compared to the fixed HIV center, which tested less than 25 MSM in eight months. PSI-training peer educators a key role in mobilizing MSM. These counselors are trusted and respected by the MSM community and helped create a comfortable environment free of stigma. Forty percent of men tested at mobile sites were HIV-positive and received referrals to fixed HIV centers for follow-up care. Less than 10 percent returned for follow-up. This lack of continued care for HIV-positive MSM could lead to negative health outcomes, increased risk of infecting partners, and propagating the epidemic in Togo.

Next steps: The project revealed the need for research into the barriers for MSM to visit fixed centers, as well as changes needed to increase follow-up care. Due to the success of mobile testing, PSI should continue and expand services to other sites, improve the referral method, and train more counselors.

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MOPE0508
Superstition, witchcraft, and HIV/AIDS prevention in Sub-Saharan Africa: the case of Ghana

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Background: Belief in superstition and witchcraft is central to the African’s conception of illness, disease causation and aetiology. While a number of anthropological studies have alluded to a theoretical link between such beliefs and sexual behaviours, there is limited empirical assessment of the association.

Methods: Using data from the 2008 Ghana Demographic and Health Survey, and applying random-effects logistic models, we investigate whether the belief that HIV can be spread through superstition and witchcraft associates with the sexual decision making of never-married men and women.

Results: Results show that men who believed HIV can be transmitted through supernatural means were less likely to use condoms at last sexual intercourse, controlling for other theoretically relevant variables. Women with similar beliefs are more likely to have experienced sexual intercourse but less likely to have used condoms at last sex. For women however, the relationship between such superstitious beliefs and condom use at last sex is attenuated by ethnicity and region of residence.

Conclusions: These findings challenge the effectiveness of the biomedical paradigm and call for a critical examination of HIV prevention programs built on the assumption that individuals are aware that their own behaviors put them at risk of infection. In designing AIDS prevention programs in Africa, policy makers need to consider the African’s notion of disease causation, belief systems and the local context by examining the interplay between socioeconomic and cultural factors.

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MOPE0509
The behavior change communication program in Banteay Meanchey province, Cambodia

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Background: Many people visit Banteay Meanchey Province (BMC), Cambodia, for business and tourism, a combination that has attracted the commercial sex industry. In 1999, HIV prevalence among BMC brothel base and non-brothel base entertainment workers (EW) was 51%, the third highest of 10 provinces surveyed. In September 2000, a 100% Condom Use Program (CUP) was implemented in BMC brothels and non brothels such as karaoke, discotheques, bars, gardens, massages, freelance, restaurant, casino hall, and night club. The program included peer educators providing counseling and training of peer educators to fix condoms, 19 SM did.8 MM and 1 SM informed women about HIV+. 10 MM and 24 SM did not.

Conclusions: The probands’ sexual life changed for the worse after they learned about their HIV-positive status, especially for women. Therefore, additional attention to this issue should be paid within the framework of psychological programs directed at HIV-positive patients.

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MOPE0510
HIV prevention for female sexual partners of injection drug users in Hanoi, Vietnam

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Background: The HIV epidemic in Vietnam is driven by injection drug use, which puts many female sexual partners (SPs) of injection drug users (IDUs) at high risk for HIV. We initiated peer-based interventions for SPs in 4 districts of Hanoi in 2008 to help them reduce their risks for acquiring HIV.

Methods: Evaluation is through serial cross-sectional surveys (behavioral interviews, exposure to interventions, and HIV testing with counseling) using modified "snowball sampling": baseline (2008) and 12-month (2009). Follow-up survey included both clients and non-clients of the intervention. Statistical methods including logistic regression compared behaviors of clients and non-clients.

Results: HIV prevalence among SPs was 14% at baseline and 9% at 12 months. Almost two-thirds of SPs were in HIV-serodiscordant or unknown status relationships. Frequency of condom use remained quite low. However, condom use at last sex was much higher among clients than non-clients (OR=3.08, 95% CI 1.257-7.57; p = 0.01) as was consistent use (always or often) over the past 6 months (OR=3.81, 95% CI 1.25-11.62; p=0.02).

Conclusions: Achieving consistent condom use in primary sexual relationships is very challenging. Our findings suggest that the interventions have helped empower some SPs in condom use negotiation and increased their frequency of use. However, other sexual risk reduction methods must be included, as well as aggressive testing and treatment of HIV-positive IDUs to reduce the risk of transmission during unprotected sex. HIV prevention interventions for SPs, an extremely high-risk group, should be scaled up.

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**MOPE0511 Partnership with Sudanese uniformed services to fight HIV/AIDS: Eiman Organization experience**

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**Issues:** Decades of civil war and limited epidemiological data make it difficult to assess the progress of HIV/AIDS in Sudan. However, it is widely agreed that the country is in the early stages of a generalized HIV/AIDS epidemic, with an alarmingly fast increasing number of HIV/AIDS cases. A wide range of service users in the most highly infected/affected population groups, with 0.5% HIV/AIDS prevalence on top of low awareness, misconceptions around HIV.

**Description:** With funding from UNFPA Sudan to “Eiman Organization for Welfare and Development” has partnered with the Sudan Uniform Services (Military Police) to raise awareness about HIV/AIDS within the Uniform Services and to increase access to HIV/AIDS services in Northern Sudan.

The main interventions were:
- Capacity building on HIV/AIDS programming among Uniform services, Peer Leadership Training and conduct Advocacy/ Sensitization/ BCC Sessions, Production of IEC materials. The project has trained senior uniform commanders to understand HIV/AIDS’ causes, stigmas and prevention; and has integrated HIV/AIDS prevention and general information into the military trainings. The project has reached over 5,000 troops with HIV prevention messages and provided HIV counseling and testing to almost 4,000 of them. The project also provided over 5,000 condoms via facility-based distribution.

**Lessons learned:**
- Building capacity on HIV/AIDS programming among Uniform services, Peer Leadership Training and conduct Advocacy/ Sensitization/ BCC Sessions, Production of IEC materials. The project has trained senior uniform commanders to understand HIV/AIDS’ causes, stigmas and prevention; and has integrated HIV/AIDS prevention and general information into the military trainings. The project has reached over 5,000 troops with HIV prevention messages and provided HIV counseling and testing to almost 4,000 of them. The project also provided over 5,000 condoms via facility-based distribution.

**Next steps:** Communication material to encourage HIV testing will be designed in partnership with SWs and Implementing Partners, keeping in mind the typology as well as their prevalent misconceptions.

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**MOPE0512 Health workers and HIV risk in Mozambique: barriers to access and use of HIV/AIDS prevention, care and treatment services**

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**Background:** Studies in sub-Saharan Africa have reported that 37% of healthcare workers and their students have had at least one workplace exposure to HIV. A representative national survey of health care workers (HCWs) and students at training institutions (TsIs) in Mozambique revealed that HCWs and TsIs were aware of workplace risks and the importance of workplace risk reduction strategies. However, in practice, the majority of HCWs and TsIs did not have access to protective equipment (PPE) and only a small proportion of health care workers and TsIs were aware of the availability of antiretroviral therapy (ART) for health care workers and TsIs who were exposed to HIV.

**Results:** In the current study, 1,623 HCWs and 1,505 TsIs answered questions about their exposure to HIV in the workplace, access to protective equipment (PPE), and access to antiretroviral therapy (ART). Respondents reported infrequent use due to lack of supplies and high workload. Participants stated that fear of stigma and losing employment would prevent disclosure of a positive status; many refused testing due to lack of confidentiality. HCWs and students were unaware of post-exposure prophylaxis (PEP), and were uninformed about benefits and services available for HIV-infected workers.

**Conclusions:** HCWs and TsIs are aware of workplace risks, but face barriers in utilization of PPE and PEP. Barriers to uptake of CT services include lack of access to confidential services and stigma. As Mozambique strives to increase the numbers of HCWs to address shortages, it must also address the need for a healthy and well-trained workforce. Key findings from this study and the quantitative survey are being used to address knowledge and equipment gaps and to provide access to confidential services.

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**MOPE0513 Importance of tailor-made communication material to improve health seeking behavior among home based sex workers, India**

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**Issues:** Home based sex workers (SBWs) are a hidden and difficult to access high-risk group. They do not prioritize their health, leading to poor health seeking behavior. Numerous misconceptions regarding STIs/AIDS also deter them from accessing health services. Specialized communication strategies are necessary to address these concerns, dispel myths and increase their monthly STI screening consultations.

**Description:** Since 2004, SHED has been implementing the FH supported Aasta project to reduce HIV/STIs among home-based SBWs in two areas of Mumbai city. Since inception, 4,003 home based SBWs have been provided STI prevention services. Keeping in mind the hidden identity of home-based SBWs, communication strategies and literature were designed. It was complemented with regular and focused outreach activities by the peer workers. One-to-one communication sessions were necessary in some of the cases as group sessions using tailor-made communication material were conducted. The material was designed with beauty tips and relationship issues as discussion points. The qualities of each session were discussed with the peer workers and the number of yearly clinical consultations has steadily increased from 574 in 2005 to 8,122 in 2009.

**Lessons learned:** Specialized communication material, keeping in mind the needs of home-based SBWs is essential in order to reduce misconceptions and improve STI related health seeking behavior. This will lead to the creation of sustainable demand for relevant services.

**Next steps:** Communication material to encourage HIV testing will be designed in partnership with BSIs and Implementing Partners, keeping in mind the typology as well as their prevalent misconceptions.

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**MOPE0514 Increasing HIV risk perception associated with cross generational sex in three cities in Cameroon:**

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**Issues:** In Cameroon, young women are more infected than young boys. The latest Demographic and Health Survey reveals that girls have three times the infection rate of HIV (7.9%) than boys of the same age group. This data shows that young women who are in transactions with men for more than 18 months are aware of their HIV status and reveals the primary role of cross-generational sexual relations between young girls and mature men in the Cameroonian HIV/AIDS epidemic. Studies show that girls are more likely to have sexual partners with men who are 10 or more years older than they are.

**Description:** Since 2006, PSI’s local affiliate, Association Camerounaise pour le Marketing Social (ACMS) has implemented a multi-channel, Cross Generational Sex campaign in three cities. The campaign is designed to raise awareness of the risks for HIV among young women and other male sex-ual partners. The three-phase campaign employs mass media, interpersonal communication and advocacy through meetings and conference. Advocacy was done by artists and leaders involved in the project and were directed to social support (parents, traditional and community leaders…).

**Lessons learned:** Preliminary data obtained through pre and post test sur-veys suggests that it is possible to change the perception of transactional sex and the associated risks for HIV in addition to social norms. Many of the young women reached by the campaign indicate that they believe they are at risk for HIV if they engage in cross generational sex. Most (95%) however, are still reluctant to use a condom with their ‘sugar daddy’ and indicate that financial reasons are the largest motivation for engaging in sex with older partners.

**Next steps:** Increasing risk perception is important to increasing condom use and HIV prevention. However, it is also important to couple behavior change communication with advocacy targeting legislative and social change.

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**MOPE0515 Peer education in HIV: emerging characteristics in the 21st century examining strengths and limitations**

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**Issues:** Peer education continues to be a frequent methodology used in attempts to provide education and information on HIV, especially for young people. However the benefits, strengths and limitations of this methodology are poorly understood and often focus on individual clinical or behavioural measures, eg condom usage or STI rates. By examining findings of three international reviews of peer education this presentation provides a detailed understanding of true peer education to assist decision makers about the use of this methodology.

**Description:** Three reviews of peer education have been undertaken by the two of the authors. In 2008 a face-face to face review of Y-PEER in 8 Eastern and Northern African countries; in early 2009 a review of peer education in 15 South Pacific Islands based in Fiji; and in late 2009 a review Y-PEER in 14 Arabic states based in Kuwait. These reviews describe specific methodologies, strengths and limitations of utilizing a peer education methodology. Strengths include cultural adaptability; integration with health services; capacity development of the workforce; development of partnerships and ability to change cultural norms. M&E, lack of clarity of definition of peer education and the effective-ness of current peer education programmes to target those most at risk were identified as three of the chief weaknesses of most peer education programs.

**Lessons learned:** Peer education is a very specific methodology however the title is often used for a much broader set of activities. This dilutes the usefulness of this terminology. Effective monitoring and Evaluation in peer education requires skills and knowledge of the methodology. Peer education requires skills and knowledge of the methodology. Peer education requires skills and knowledge of the methodology.

**Next steps:** Implementing a framework to each of the inter-national reviews will ensure the refinement and continued success of this education methodology.

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MOPE0516
Supporting faith based organisations (FBOs) leaders to advocate for prevention of HIV and gender based violence (GBV), and promoting use of sexual reproductive health (SRH) services
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Issues: HIV and GBV are critical concerns in South Africa. 18.8% of 15-49 years have HIV. Some FBOs view this as a ‘curse’. FBO leaders are esteemed in society, their position and community interactions provides them with platforms to educate on HIV/GBV prevention. KwaZulu Natal Christian Council works on capacity building, information, education and advocacy projects for FBO leaders to advocate for HIV/GBV prevention, promote SRH services use, contribute to HIV prevention, and do practical work to mitigate the impact of AIDS.

Description: This project in five regions carries out the following activities:
1. Sensitization of FBO leaders on sexuality issues, advocacy for HIV/GBV prevention, and promotion of SRH services.
2. Training ‘Master Trainers’, who train others in targeted provinces.
4. Trainers cascading training to communities through formal/informal training.

Advocacy for services, treatment, VCT and education (SAVE approach).

Lessons learned:
1. Training of FBO leaders contributed positively in creating HIV understanding, promoting behaviour change, and dispelling HIV-associated myths. FBO leaders in the project now integrate HIV/STI messages in sermons.
2. Trained FBO leaders have better understanding, willingness and capacity to educate communities on promoting safer sexual behaviours.
3. Youth Master Trainers effectively reach out to other youth in FBOs/communities.
4. FBOs are an important sector in implementation of BCC strategies.
5. Provincial Government is responding positively by accepting more faiths in the Provincial AIDS council.

Next steps: conclusions
1. Promote collaboration with local NGOs working on HIV to ensure synergy and no miss outputs.
2. Expand the knowledge, experience and information to other areas/provinces and sub-region countries.
3. Encourage more FBO leaders to a role in HIV with education and sensitization specifically aimed at dismantling myths about HIV transmission and stereotyping of vulnerable individuals.
4. Expand the advocacy network to involve communities and senior church leaders.

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MOPE0517
BEST - Better Equipped to Start Treatment.
A programme led by patient advocacy workers to assist PLWHIV to feel more informed and confident in making treatment decisions; to improve the dialogue between patients and their health care team, and to create a natural flow through from diagnosis to starting treatment
B-West
Chair BEST Advisory Board, Edinburgh, United Kingdom

Issues: In Europe, many people start ART with a CD4 count lower than guide-lines recommends which is associated with worse morbidity and mortality. Late commencement of ART will likely be more pronounced with earlier ART initiation, when CD4 counts reach 350 in Europe and is likely to reflect both physician and PLWHIV factors.

Description: A multi-disciplinary team of patient advocacy workers, PLWHIV, community representatives and health care professionals collaborated on the design of a toolkit for PLWHIV.

BEST supports PLWHIV and/or health care workers to run workshops locally. It assists PLWHIV who find it difficult to access information and compliments information available in other health care settings. Launched in Cologne in 2009 to a group of 39 people from 6 nations, BEST is now rolling out across Europe.

The toolkit is split into 5 sections:

1. Building the Best Relationship with Your HIV Clinic.
2. HIV and ART: Questions and Answers.
3. Preparing and Readiness to Start ART.
4. When to Start Treatment.
5. Ready to Start? Add CD4 Count of 350: A “Running Workshops” section deals with facilitating audience participation and evaluation.

Lessons learned:

1. The BEST materials and workshop format was commented and was felt to address an unmet need within individual countries.
2. Materials are being expanded to include modules that address psychosocial issues, and barriers to treatment at a national level.
3. Regular updates to BEST are planned every six months to optimize the chance of programme success.

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MOPE0518
The associations between pre-sexual agreements, substance use, and unprotected receptive and insertive anal intercourse in a sample of men who have sex with men
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Background: Unprotected receptive and insertive anal intercourse (URAI/UIAI) are significant risk factors for HIV transmission among men who have sex with men (MSM). This study sought to examine the associations between pre-sexual agreements with casual sex partners, substance use during sex, and URAI/UIAI.

Methods: This study used cross-sectional data from single gay/bisexual men who reported engaging in anal sex with male sex partners they met online and in a bar (n = 916). Using Mplus version 5.1, we estimated latent class models with a six-class solution for agreement and a four-class solution for substance use. Adjusting for demographic characteristics, STATA-IC version 11 was used to regress URAI/UIAI on the derived categories.

Results: Of the six pre-sexual agreement groups, five involved a decision to have anal intercourse (no anal, anal with a condom, anal with a condom and no drugs, and barebacking). One group only agreed to no drugs. During sex, the men fell into four groups of substance use: abstinence, a greater odds of UR (POR=3.55, 95%CI: 2.00, 6.30) and UIAI (POR=3.55, 95%CI: 2.00, 6.30) and both drunk and high regardless of meeting place. When entered into the regression models, the group that agreed to anal sex without specifying condom use had a greater odds of UR (POR=3.55, 95%CI: 2.00, 6.30) and UIAI (POR=3.55, 95%CI: 2.00, 6.30) than the group that did not use either substance when meeting for anal sex.

Conclusions: Interventionists should encourage explicit pre-sexual agreements and discourage combining alcohol and drugs to increase the odds of condom use and substance-free sexual encounters.

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MOPE0519
Designing HIV/AIDS messages in Uganda for youth, by youth
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Issues: This research explores the impact of active participation in the design process for HIV/AIDS related messages for youth in Uganda. Case studies in consultation with the AIDS Support Organization (TASO) and the Makerere University Walter Reed Project (MUWRP) showcase design workshops whereby participants identified and responded to critical HIV/AIDS related issues including HIV-testing, cross-generational sex and ‘transactional love’.

Description: Through the nourishment of creative expression in an active learning process participants were equipped with knowledge and confidence, inspiring collective design responses in the form of large-scale paintings in the public space. Collaborations among youth groups and with local youth artists informed the concepts for the messages and helped to build community. Designs were tested and refined through peer-to-peer communication and final messages were approved by public health professionals before being reproduced as paintings by the participants and local artists.

[Mural in Namuwongo, Uganda]

Lessons learned: Paintings were shown to appeal to and resonate among fellow youth audiences. A more sustainable impact, however, was shown in messages and processes became embodied within the participants and artists themselves, as they were empowered to become ongoing agents of change. Initial guidelines and considerations for youth-to-youth communication and sensitization were developed.

Next steps: These include include promotion and distribution of the participatory design model as well expansion of the approach to involves other art disciplines including those of the urban arts as well as traditional art practices.

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MOPE0520
The impact of pre-antiretroviral testing and counseling on sexual practices
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4University of Nigeria, Teaching Hospital, Medicine, Enugu, Nigeria

Background: With the introduction of HAART (Highly Active AntiRetroviral Therapy), HIV has become a chronic disease with a growing burden on the public health system. With improved quality of life HIV infected patients may resume sexual function raising the need for secondary prevention. This study addresses the impact of pre ART (Antiretroviral Therapy) counseling by as-

Methods: Participants who were enrolled in the ARV clinic of Enugu State University of Technology Teaching Hospital, Parklane, South East Nigeria. ART clinic is operated by Aidsrelief in partnership with the Enugu state govern-

Background: Liberia’s two decade civil war resulted in the breakdown of so-
cial norms and devastated the education, health and employment sectors, contributing to the emergence of high risk sexual behaviors among youth. There are no published qualitative reports of adolescent sexual risk behaviors.

Results: Of the 229 participants 213 (71.2%), 76(35.7%) were males and 137 (64.3%) were females. The male female ratio was 0.6:1. Amongst the 626 HAART-eligible participants had poorer impact (82.5%) than married partici-

Conclusion: Pre ART counseling impacts positively on the sexual practices of HIV-infected patients. There is a need for HIV prevention programs to address issues of risk-reduction counseling, couple counseling which focuses on HIV transmission risk, and safer sexual practice regardless of HIV status of the partner of a HIV-positive patient. Surveillance systems for sexual risk behav-

MOPE0521
Cultural adaptation of making proud choices, HIV prevention curriculum in post-conflict Liberia
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3Pacific Institute for Research and Evaluation (PIRE), Louisville Center, Louisville, United States

Background: With the introduction of HAART (Highly Active AntiRetroviral Therapy), HIV has become a chronic disease with a growing burden on the public health system. With improved quality of life HIV infected patients may resume sexual function raising the need for secondary prevention. This study addresses the impact of pre ART (Antiretroviral Therapy) counseling by as-

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MOPE0522
Adapting the evidence based intervention SISTA for non-English speaking monolingual women: lessons from the Chieh Mei Ching Yi/Sisterhood project
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2University of California Los Angeles, Urban Planning, Los Angeles, United States

Issues: Monolingual Chinese women in Los Angeles County face severe bar-
riers to HIV prevention, including structural factors (immigration status, pov-
erty, exploitation in employment, lack of education and job skills, linguistic isolation) and cultural/individual factors (lack of information, cultural norms precluding sexual communication). To address these obstacles, APIAT adapt-

Description: Adaptation required substantial changes to SISTA, originally developed for African American women, to address logistical barriers (e.g., scheduling constraints) and cultural barriers (e.g., communication modes, gender expectations, interpretations of empowerment). Consequently, the Sisterhood Project consisted of fewer but longer sessions; new strategies to accommodate Chinese norms of self-esteem, gender, and communication, and program incentives that addressed household rather than individual needs...

Lessons learned: Preliminary data from 102 women, from pre-test to post-
test, showed a 60.9% increase in HIV knowledge and 33.4% increase in in-
tention to engage in risk reduction behaviors among participants (p< 0.01).

MOPE0523
Depressive symptoms and intervention effects on quality of life
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Background: Depression has been consistently linked to poor quality of life for people living with HIV/AIDS (PLWHA). However, few studies have exam-

Methods: Eight hundred thirty-six individuals, including PLWHA and their family members, were recruited from four district hospitals in northern and northeastern Thailand. . Quality of life was measured by the World Health Or-

Conclusions: Our findings suggest that cognitive behavioral interventions are effective in improving the quality of life of PLWHA and their family mem-

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**MOPE0524**

**Evidence-based HIV prevention campaign increases condom use among youth in Burundi**

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Background: Burundi has a national HIV prevalence of 4%. Among youth aged 15-24, HIV prevalence is 2.9% in rural areas and 3.8% in urban areas. PSI/Burundi implemented a national HIV prevention program targeting youth through radio, television, mobile videos, and peer education. To inform and evaluate its program, PSI/Burundi conducted studies on the use of condoms with nornal marital partners and the factors associated with condom use.

Methods: The data presented come from two nationally representative surveys conducted in Burundi in 2006 and 2009. Each used a two-stage sampling approach, selecting enumeration areas and then households. All consenting youth aged 15-24 were interviewed; 2,155 youth were surveyed in 2006 and 3,486 were surveyed in 2009.

The changes over time were analyzed using a U-ANOVA and the determinants of condom use were determined through the use of logistic regression.

Results: The determinants of consistent condom use among youth in the 2006 survey were self-efficacy to refuse sex without a condom and partner support for condom use. These findings informed the program design and messaging. The 2009 follow-up study showed a significant increase (p<.001) in consistent condom use during the last 12 months with nonmarital partners, from 11% in 2006 to 38% in 2009. Consistent condom use was significantly associated with exposure to PSI’s HIV prevention campaign (p<.001); 36% of youth not exposed to the campaign used condoms consistently, whereas 46% of those exposed used condoms consistently. Married youth were more likely to use condoms consistently with nonmarital partners than married partners, more likely to use condoms consistently than married partners. Program activities should continue to emphasize the identified determinants of condom use, particularly acceptance of delayed sexual debut amongst young people and use of contraceptives.

Conclusions: PSI’s HIV prevention program had a positive effect on consistent condom use with nonmarital partners. Program activities should continue to emphasize the identified determinants of condom use, particularly acceptance of delayed sexual debut amongst young people and use of contraceptives.

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**MOPE0525**

**Constructivist role-play for HIV/AIDS prevention among female sex workers**


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Background: In Brazil, studies conducted during the 90’s and during the first years of the new century showed that women have a high level of information about how HIV is transmitted and also the means of prevention. However, the perception of personal risk of acquiring an STI or HIV was extremely low considering the significant increase of HIV/AIDS among girls and women in the country. The objective of this project was to deliver HIV/AIDS education and prevention to low-income communities of the city of São Paulo, Brazil aiming to reduce the risk of HIV and STDS among female and male adolescents.

Methods: Ten 10 psychologists were trained on the AIDS constructivist role-play methodology, which is based on the techniques described in “Role-play” by Carrington, and the “Social constructionism” by Michael White. A total of 8,350 teenagers of poor and underprivileged areas of São Paulo participated in the role-play sessions. The techniques were applied aiming to understanding and deconstrucion of myths, values and beliefs about sexuality, gender issues, sexuality transmitted diseases, injectable drugs, public health and HIV/AIDS as a means to foster deep and lasting behavioral change that leads to HIV/AIDS prevention. Pre- and post-intervention questionnaires were also applied.

Results: The comparison between pre- and post-intervention questionnaires showed immediate and significant change in behavior in all adolescent groups participating in the project.

Conclusions: AIDS constructive role-play is an inexpensive and fast technique to deliver information and to trigger behavioral changes among adolescents.

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**MOPE0526**

**Tangible skills building and HIV-interventions**

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Background: Reading and performing art resonate more with adolescents’ priorities than pure knowledge transfer about HIV. This study evaluated a community-based approach involving children and caregivers, through literacy and community theatre, indirectly addressing HIV. Literacy was a key priority identified by youth in the area. The project was driven by the idea of letting youngsters express themselves through free writing and self-created drama, thus supporting active participation rather than passive listening. The quantitative part of the study revealed literacy classes had a positive impact on attitudes towards condoms and delayed sexual debut amongst youngsters.

Methods: Five focus group discussions (theoretical sampling) were conducted (theoretical sampling). Parents, adolescents and facilitators were interviewed. The transcribed interviews were analyzed using content analysis and the theory of social representations as conceptual framework.

Results: The project improved the perceived caregiver-child relationship.

**MOPE0527**

**To use or not to use: exploring the determinants of consistent condom use among female sex workers in Cameroon**

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Background: Female sex workers (FSWs) face serious risk of STD and HIV infection. Program interventions targeting this population should focus on consistent condom use regardless of partner type. AIMS conducted a cross-sectional behavior survey in October 2009 to analyze the determinants of consistent condom use in order to inform an HIV and STD prevention program among FSWs in Cameroon.

Methods: A total of 385 FSWs were sampled. Participants were recruited from bars, nightclub, walkways, trucks stations and brothels using the time location sampling technique. Opportunity, ability and motivation to use condoms were assessed using multi-item scales measured on a four-point Likert scale (ranging from 1 for “totally disagree” to 4 for “totally agree”). Multiple logistic regression models were used to assess associations between consistent condom use and the factors.

Results: The results show that white knowledge about HIV/AIDS is high among FSWs, only 52.2% reported consistent condom use with nonspousal partners. Factors identified as significantly and positively associated with consistent condom use were: HIV transmission knowledge (OR=30.90; p<.001), not being pressured by the partner to have sex without a condom (OR=1.87; p<.001), assistance to sexual partners in using condoms (OR=1.56; p<.001), perceived self-efficacy to negotiate condom use (OR=4.44; p<.001), internal locus of control (OR=2.12; p<.001).

Conclusions: This study contributes to the first evidence-based program for FSWs in Cameroon that addresses behavioural determinants of condom use. The findings suggest that a behavioural intervention should be implemented for FSWs using multiple strategies like community discussion and peer-education to increase HIV transmission knowledge, teach FSWs how best to assist partners in using condoms, and help FSWs believe they can control what happens to them. Emphasis should be placed on addressing pressure from partners to have sex without condoms and reinforcing self-efficacy by improving negotiation skills.

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**MOPE0528**

**Self-efficacy and perceived effectiveness of self-care symptom management strategies used by individuals with HIV and ART-related symptoms**

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Background: HIV care symptom management strategies (SCSMS) are usually performed at home. The purpose of this study is to identify variables associated with SMS among people living with HIV/AIDS (PLHIV) living in the United States. March 2007-May 2008, 310 PLHIV living in New York City, New York, USA enrolled in the study. A total of 72% of participants reported using self-care symptom management strategies at baseline. The aim of the study was to identify factors associated with SMS. Two hundred and sixty-seven participants reported SMS at baseline. Eight factors were identified as potential predictors: age, gender, education, marital status, current employment, having health insurance, living with others, and adherence to antiretroviral therapy (ART).

Methods: The selected SMS were grouped into four categories: physical symptom management, psychological symptom management, social interactions, and self-care. The factors were assessed using a multi-item scale measured on a four-point Likert scale. The factors were assessed using a multi-item scale measured on a four-point Likert scale. The factors were assessed using a multi-item scale measured on a four-point Likert scale. The factors were assessed using a multi-item scale measured on a four-point Likert scale. The factors were assessed using a multi-item scale measured on a four-point Likert scale.

Results: The factors that were associated with SMS were age, gender, education, marital status, having health insurance, living with others, and adherence to ART. The factors that were not associated with SMS were current employment and living with others. The factors that were associated with SMS were age, gender, education, marital status, having health insurance, living with others, and adherence to ART.

Conclusions: The findings of this study suggest that SMS are associated with age, gender, education, marital status, having health insurance, living with others, and adherence to ART. These findings have implications for future research and practice in HIV care.
MPOE0529 Adherence to antiretroviral treatment in HIV-positive patients in a Cameroon context: promoting the use of medication reminder methods (the STRALLT ANRS 12-110 trial)

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Background: Antiretroviral treatment (ART) scale-up in Sub-Saharan Africa has made it possible to investigate the maintenance of adherence to HIV medications in HIV-positive patients more thoroughly. This study gives us the opportunity to describe adherence to ART during follow-up and identify its correlates in the Cameroon context.

Methods: The STRALLT (ANRS 12-110) is a 24-month randomized trial conducted among 459 HIV-infected adults followed up in 9 district hospitals in Cameroon. Its primary objective is to compare the clinical efficacy of a simplified follow-up monitoring model for ART-treated HIV-infected patients with that utilized in the standard approach. A mixed logistic regression model was used to identify factors associated with adherence to ART in 409 patients with data on adherence.

Results: While 27% of patients were non-adherent after the first month on ART, this value reached 39% after 24 months. After adjustment for known factors of adherence to ART (i.e., duration since ART initiation, HIV clinical stage, binge drinking, knowledge about ART & ART side-effects), patients who were satisfied with health care providers’ interest, in terms of listening or providing information (OR [95%CI] = 1.9 [1.4-2.4]), and those who implemented medication reminder methods (e.g. using an alarm clock, the help of a relative (OR [95%CI] = 1.4 [1.0-1.7]), or other methods (OR [95%CI] = 1.6) were more likely to be adherent to ART.

Conclusions: Besides some correlates already known to have an impact on adherence to ART, such as knowledge, motivation and side effects, our findings underline the need to reinforce the counseling component of follow-up. In an African context, where task shifting plays a major role in accessing ART, training in HIV care is a fundamental step. Among other things, training should encourage the use of medication reminder methods through reinforced counseling, in order to assure adherence over time and improve response to ART.

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MPOE0530 Adolescent reproductive health intervention using mass media: the Talk2Me experience

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Background: Adolescent sexual and reproductive health is a critically important policy and programmatic issue in Sub-Saharan Africa given the generalized AIDS epidemic that has taken hold in many countries as well as a public health crisis. Research has shown that adolescents (15-19 years) are the most vulnerable group to the sexual transmitted infections (STIs) and of unintended pregnancies and early childbearing. The mass media have become a major source of information for mass media professionals can exercise their influence by providing accurate information and modeling responsible behaviours.

Methods: The mass media role in providing information were questionnaires and focused group discussions. 5 focused group discussions were facilitated; 5 in each of the 10 participating schools on different topics. Participants at the participating schools were the students. The students were facilitated by trained peer educators and were designed to be very participatory. Participants shared personal stories which were published. An editorial committee gathered the reports from the different groups and produced them as a newsletter (Talk2Me) on a monthly basis.

Results: The young people were excited with the project and so looked forward to every meeting. A total of 10 schools participated in which 1000 participants benefited directly from the intervention and 5000 more benefited through the newsletter. The readership of the newsletter increased 2.3 times and 1.8 times for the newsletter and on line newsletter respectively.

Conclusions: Schools are an important site where young people can acquire knowledge and skills that can help them to avoid the HIV infection and in the future.

Issues: Adolescents are fun-loving, so every intervention targeting them should be designed to suit this audience. Teaching methods should be scaled-up to more inclusive and participatory methods to improve youth-friendly services.

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MPOE0531 Consistent condom use among youth in Tobago: baseline findings to inform an HIV prevention intervention

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Background: Young women are disproportionately affected by HIV/AIDS in Trinidad and Tobago. Recent studies suggest that HIV prevalence is higher among 15-19-year-old females compared to males. PBI/Caribbean and the Society for Family Health (SFH) are implementing a World Bank-funded HIV prevention program in Tobago to address this disparity by promoting consistent condom use among sexually active young men and women through peer education.

Methods: Sexually active youth (n=407) (16-26 years) were recruited using time location sampling to participate in a baseline behavioral survey to identify determinants of condom use in 2009. Variables included demographics, sexual behaviors, and behavioral determinants of condom use. Consistent condom use (CCU) was defined as using condoms in every sex act out of all sex acts with regular, casual and commercial partners in the last month. Multivariate logistic regression was used to identify the most significant independent variables associated with CCU. Analysis of variance was used to estimate the adjusted means/proportions of each independent variable by CCU.

Results: Only 9.3% of participants reported CCU with all partners in the last month, while 32.5% reported using a condom at last sex. Significant predictors of CCU included: 1) having fewer regular partners in the last month (p<0.01); 2) carrying a condom at the time of the interview (p=0.001); 3) not feeling embarrassed to ask partners to use condoms (p=0.05); 4) intending to use condoms consistently with all types of partners (p=0.01).

Conclusions: Condom use is not widely practiced among sexually active youth in Tobago and findings highlight the discrepancy between measures of “consistent” and “last sex” condom use. Future efforts should improve understanding of partnership and power dynamics to develop effective strategies for promoting consistent condom use among youth in all types of relationships, in particular regular partnerships characterized by trust and intimacy.

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MPOE0532 Social support of HIV infected adolescents receiving antiretroviral therapy in Chiang Mai province, Thailand

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Issues: Treating HIV infected children with antiretroviral therapy allows these children to live longer and to reach adolescence. As adolescents living with HIV, they are faced with physical, mental and emotional challenges during the transition period towards adulthood. Therefore, these adolescents will need resources in order to promote appropriate behaviors resulting in a better quality of life.

Description: The purpose of this descriptive study was to explore the sources of social support for HIV infected adolescents receiving antiretroviral therapy in a government health care facility in Chiang Mai province. The sample size was 278 out of a population of 407 using purposive sampling. The study was conducted from September 2008 to February 2009. The instruments used were social support questionnaires adapted from Brandt & Weintz (1985) and translated to Thai by Chommanard Wannapornsiri (1992). The reliability was 0.75.

Lessons learned: The study found that the overall social support for HIV infected adolescents receiving antiretroviral therapy was at a moderate level with a mean of 102.00 and a S.D. of 9.90. When looking at each component, it was found that there was a high level of receiving assistance and guidance [mean = 26.62; S.D. = 2.73]; and intimacy of love [mean = 26.57; S.D. = 2.85]. The data also showed a moderate level of self esteem [mean = 25.80; S.D. = 3.14]; being part of society [mean = 17.82; S.D. = 2.46]; and ability to support other people [mean = 18.16; S.D. = 2.50]. In addition, this study examined sources of social support from family members, friends, and teachers/mentors.

Next steps: The findings of this study may be used as baseline data in social support planning for HIV infected adolescents receiving antiretroviral therapy to improve quality of life. A follow-up study is now being implemented in a health care setting in Thailand.

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MOPE0534
Long-term impact of correct knowledge of non-transmission routes of HIV in school settings on primary school children's attitudes towards HIV/AIDS affected by AIDS in Northern Thailand
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Background: Children affected by AIDS are often discriminated against by their peers in school. There are some evidences that children's negative attitudes towards children affected by AIDS often originate from their fears of HIV infection through casual contacts with these children and could be improved through providing correct information on HIV transmission especially on non-transmission routes of HIV. However, little is known about the long-term impact of AIDS education on children's attitudes. This study examined the long-term impact of correct knowledge of HIV transmission routes on primary school children's attitudes towards children affected by AIDS targeting children in grade 3 to 6 in northern Thailand.

Methods: A total of five primary schools participated in the study. Three schools provided AIDS education on non-transmission routes of HIV focusing on casual contacts among children in school settings. Children answered the questionnaire which asked their knowledge on HIV and attitudes towards child affected by AIDS before and after the education session, and two years later. The results were compared between children who participated in the AIDS education session and children who did not. In total, 143 children answered the questionnaire.

Results: After the education session the children's knowledge and attitudes have improved significantly compared to the children without AIDS education. The children have acquired the same level of knowledge after two years and their attitudes have improved further. The knowledge of children who did not receive AIDS education has also improved but did not improve to the same level as children who received education after two years, whereas there was still a significant difference in their attitudes.

Conclusions: The effectiveness and long term impact of information on non-transmission routes of HIV for school children's attitudes was demonstrated, which has an importance for AIDS education in the school and nurturing supportive environment for children affected by AIDS. Presenting author email: nishikawa9505@gmail.com

MOPE0535
Clinical social work practice with HIV/AIDS patient
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Background: This article shows a framework effective in changing negative narratives of HIV/AIDS patients using a dynamic process and systematic skills. Although a traditional narrative approach argues that a person has the power to switch from an oppressive story to an alternative story, the explanation of the dynamic change process in negative narratives is incomplete. This study attempted to eliminate this deficit and to measure the process of the change.

Methods: The dynamic constructing process of a negative narrative was explained using the framework of a deviance amplifying feedback loop (DAFL) between mutual Constitutive rules (cR) and Regulative rules (rR). This is a dyadic system based on systems theory and Coordinated Management of Meaning theory (CMM). Systematized skills were used to change the patient's DAFL and improve his social adaptation.

Results: To transform the client's DAFL, the higher level of context in the client's DAFL was replaced from Life-script to Ego-state using circular questions. Solution Focused Brief Psychotherapy (SFBP) questions and circular questions were used for constructing new cR and rR. As a result, a new feedback loop in which the client could choose new behaviors was generated and the client's adaptation level was stabilized in his ecological system. Moreover, the measurement method of the process of changing the client's DAFL by applying Bialescu & Cochrane's (2001) Conceptualization.

Conclusions: Through this case study, the dynamic process of changing a client's negative narrative was explained. This framework, based on systems theory and CMM, was effective in solving this patient's DAFL. The use of circular questions and SFBP skills were efficacious in differentiating the elements of the sequence for changing his DAFL. This framework proved beneficial in improving the social adaptation level of this HIV/AIDS patient. Presenting author email: oshita@pu-hiroshima.ac.jp

MOPE0536
AIDS related knowledge, attitude and behavior among college students in China
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Background: To analyze knowledge, attitude and behavior related to HIV/AIDS among college students in China.

Methods: A self-administered programmer of survey was conducted in 9 provinces, 19,124 college students were enrolled by using a stratified cluster sampling at the universities or colleges.

Results: The awareness of transmission route about HIV/AIDS was better than that about other SSTs, especially among the student of females (male: 13.3%, female: 5.0%). Among responders who had sexual behavior, only 24.8% of them use condom in each sex. 10.5% (male: 12.6%, female: 5.1%) had commercialized sex behavior. Male students with higher level of consumption associated consensual information, smoking, drinking were risky factors of attitudes towards HIV/AIDS behavior and having sex. The risky factors of commercialized sex included visiting pornographic places of entertainment (OR=6.806), abortion history of the responder himself/herself or his/her sex partner (OR=5.240), smoking (smoking everyday OR=1.916), and of female students were the protector behavior (OR=0.905). While keeping the conservative attitude towards sex (OR=0.905) and having contraceptive intention were the protect factors (OR=0.907). Condom use behavior had positive relationships with knowledge related HIV/AIDS, attitude toward high risk sexual behavior, condom use intention, and self-efficacy on condom use.

Conclusions: The colleges/universities are vulnerable to HIV infection especially for sexual transmission. Teaching methods should be more close attention to avoid casual contact and drinking, exposing to pornographic information, with higher level of consumption, should be a HIV/AIDS protective. The context of education should focus on non-transmission routes of HIV/AIDS and self protection skills.

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MOPE0537
Integrating play into a pediatric HIV clinic to educate HIV infected and affected children about safe water and hand washing, Mombasa, Kenya
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Issues: The HIV prevalence in Mombasa is 14%, and in Kenya HIV/AIDS and diarrheal diseases are the second and third leading causes of child mortality. Studies show consuming clean water can reduce the risk of diarrheal diseases. Bomu Medical Centre, Mombasa serves 2,546 HIV-infected children, 773 of whom have been initiated on antiretroviral therapy. Project Sunshine, a US-based nonprofit, operates clinic-based and outreach programming at Bomu on HIV/AIDS prevention and education.

Description: We initiated a pilot clinic-based educational and outreach program to increase knowledge and practice of safe water and hand washing techniques. Eleven young adults from an HIV Post Test Club were trained as Bomu/Project Sunshine Mentors and were provided a weekly stipend. Mentors engaged children in play sessions in the clinic to teach safe water usage and hand washing. Approximately 2,500 sessions were held in a playroom during children's routine clinic visits. Mentors reinforced the lessons taught in clinic through 500 home visits to households of particularly vulnerable children.

Results: Mentors disseminated behavior change tools (safe water vessels, chlorine, soap), monitored use, and reviewed correct hand washing procedures. Home visits allow Mentors to understand circumstances in the home that may prevent access to clean water or hand washing procedures. Presenting author email: aabid.ahmed@mkomani.org

MOPE0538
Changing behavior of youth at higher risk of getting HIV through engaging them in small support teams (SST) in Orenburg, Russian Federation (RF)
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Issues: The youth studying in boarding and vocational schools in Orenburg is at higher risk of getting infected by HIV as most of their time is spent away from family. While left without any adult/parental/caregiver monitoring, boarding/vocational school youth have easy access to drugs, sex and alcohol. Though surveys demonstrated high level of awareness/knowledge about HIV (about 60% correct and consistent answers to HIV prevention and transmission related questions), HIV related risky behavior are still practiced.

Description: During 2007-2009 World Vision (WV) RF implemented HIV prevention pilot targeting youth in boarding and vocational schools in Orenburg. One of critical components of the project was the formation and piloting of SST consisting of the youth age group (average ten students), the teacher of the given class and a local faith leader. The purpose of piloting this SST concept was to create supportive environment and friendly space where youth can feel comfortable to discuss issues regarding life, sexuality, family with peer team members. WV RF documented lessons learned and best practices of this project of 2009. Five FGDs were conducted with the youth involved in the project (two with youth engaged in SST, three with youth engaged in general HIV prevention activities).

Lessons learned: Behavior change is more likely to occur among youth engaged in SSTs when compared with the students who received lecture and video-intervention. Youth involved in SSTs reveal more encouragement to develop trust and supportive environment with their peers which allowed youth to openly share their thoughts and experiences. The students were concerned about healthy living and motivates them to take appropriate action to protect themselves from HIV infection.

Next steps: An experimental research will be conducted to examine causal relationships between SSTs and behavior change, and to strengthen and support the evidence of SSTs contribution to behavior change among youth at higher risk. Presenting author email: natalia_cherednichenko@wvi.org

175
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Author Index

XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria
MOPE0539
Strategic alliances with religious leaders to implement HIV/AIDS programs in low HIV prevalence and high stigma conservative Islamic North East province, Kenya
A. Haji Farah, APHIA II NEP, Community Outreach, Garissa, Kenya

Issues: Discuss the importance of building alliances with religious leaders to implementing HIV/AIDS programs in a conservative Islamic setting with low prevalence and high stigma.

Description: This project discusses the impact of collaboration with religious leaders in the implementation of HIV/AIDS programs in the North East province of Kenya.

Results: The collaboration with religious leaders has been effective in implementing HIV/AIDS programs in the conservative Islamic setting.

Conclusions: Building alliances with religious leaders is an effective strategy for implementing HIV/AIDS programs in conservative Islamic settings.

Methods: Qualitative and quantitative methods were used to assess the impact of the collaboration.

MOPE0540
Effectiveness of oral HIV/AIDS prevention messages for illiterate rural women in the Amhara region, Ethiopia
G. Bogale1, H. Boeri, E. Seydel1
1Department of Psychology and Communication of Health and Risk, Eindhoven, Netherlands

Background: In Ethiopia, 55% of the population is illiterate. The development of effective HIV/AIDS prevention messages for illiterate women is crucial.

Methods: Various communication strategies were employed, including drama, film, and public health campaigns.

Results: The effectiveness of the messages was evaluated through surveys and interviews.

Conclusions: The messages were effective in increasing knowledge and changing attitudes regarding HIV/AIDS prevention.

MOPE0541
Strategic alliances with religious leaders to implement HIV/AIDS programs in low HIV prevalence and high stigma conservative Islamic North East province, Kenya
A. Haji Farah, APHIA II NEP, Community Outreach, Garissa, Kenya

Issues: Discuss the importance of building alliances with religious leaders to implementing HIV/AIDS programs in a conservative Islamic setting with low prevalence and high stigma.

Description: This project discusses the impact of collaboration with religious leaders in the implementation of HIV/AIDS programs in the North East province of Kenya.

Results: The collaboration with religious leaders has been effective in implementing HIV/AIDS programs in the conservative Islamic setting.

Conclusions: Building alliances with religious leaders is an effective strategy for implementing HIV/AIDS programs in conservative Islamic settings.

Methods: Qualitative and quantitative methods were used to assess the impact of the collaboration.

MOPE0542
Alternative approaches to reaching youth in their communities with lifesaving HIV/AIDS information in Dokol district, Northern Uganda
H. Kyarismia
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Issues: Eighty-two percent of the Ugandan population lives in a rural area, and there is a need to devise innovative and effective ways to reach them.

Description: This project discusses the effectiveness of using religious leaders to deliver HIV/AIDS information.

Results: The use of religious leaders was effective in reaching youth in rural areas.

Conclusions: Religious leaders can be an effective means for delivering HIV/AIDS information.

Methods: Qualitative and quantitative methods were used to evaluate the effectiveness of the approach.

MOPE0543
Impact of peer education on HIV knowledge and attitude among technical university students
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Background: HIV education is vital among young people to reduce high-risk behavior and prevent virus transmission. The aim of the study was to evaluate the impact of peer education activities among students at technical universities in Tbilisi, capital of Georgia.

Methods: 10 specially trained students from Medical University were conducting HIV peer education activities (lecture and group discussions) at the technical university. Number of students participating in educational intervention was 194. They were enrolled in small groups (20 students in each group). One month after the educational sessions the survey evaluating HIV knowledge and attitudes was conducted among 194 students attending and 200 students not attending HIV educational intervention using self-administered questionnaire. The knowledge level was categorized into 4 levels based on correct answers: poorly aware (< 60% of HIV knowledge questions), partially aware (60-80%), well aware (>80%).

Results: The strongest predictor of knowledge score was attending educational activities. Students attending HIV lectures/group discussions had better scores than students who were not attending (P<0.001). There was a significant association of knowledge score with age, gender and department of technical university in intervention as well as of control group. Partially aware (PR=3.8, P<0.01).

Conclusions: HIV peer education by students of Medical University was effective tool in increasing HIV knowledge and awareness. The number of students members are involved in this method could be efficiently used to deliver HIV prevention messages to young people at different universities.

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MOPE0544
Community health improvement project (CHIP) for Kenya ports authority KENYA from 1st July 2008 to 30th June 2009
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Issues: A Community Health Improvement Project (CHIP) is a strategic initiative that Kenya Ports Authority undertook to address a critical organizational issue: lack of impact of the HIV workplace prevention program in the year 2008/2009 with support of University of California under the Management Development Institute Program.

Description: The goal was to have an effective HIV/AIDS program within the Authority so as to reduce HIV prevalence and improve productivity with the objective of reducing the HIV transmission rate by 50% at KPA by 30th June 2009. This was achieved by training 15 new peer educators to add to the existing number and conducting refresher courses for 125 peer educators in February 2009. Condum distribution outlets were increased by 10% by buying and installing 80 condom dispensers in June 2009. The peer educators increased sensitization sessions for employees and their dependants. This was done through intranet, office to office, house to house sessions using audio-visual equipments, discussion groups, provision of credible IEC materi- als, education and demonstration on proper use of condoms. On evaluating the CHIP at the end of that period, there was an increase in number of people enrolled in the prevention program (11,304 up from 7,409), an increase in condum uptake (58,564 from 40,555) hence an increase in patients enrolling for Antiretroviral Therapy (350 from 238). The uptake of HIV counseling and testing went up from 466 to 759.

Lessons learned: The CHIP is a good tool that allows program officers to strategically solve key issues in the project or organization.

Next steps: Ports Authority HIV/AIDS program will continue to use the CHIP in identifying the keys issues affecting the employees and plan and strategy to address the specific health situation. The next issues are in increasing number of employees infected to seek treatment early and increasing adherence to ARVs.

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MOPE0545
Creating a platform for information, dialogue and advocacy on HIV and TB in Namibia, Southern Africa
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Issue: The common misconceptions surrounding HIV and TB worsen stigma resulting in an atmosphere of silence and denial. This inhibits effective communication and information availability about these conditions and increases vulnerability to infection. This led SAMIDS to establish a National Partnership Platform for civil society in 2008. The goal was to improve effectiveness, accountability and quality of National HIV and TB responses through civil society engagement and to improve opportunities and capabilities of vulnerable groups.

Description: With 10 CSOs in Namibia, SAMIDS created a partnership coordination group. Organised an electronic discussion forum, trained a group of in-country writers who document local HIV realities bringing to the fore the voice of the marginalised, held a series of community dia- logues, discussion forums, outreach in different regions and national advocacy campaigns.

Lessons Learned: Through the intervention an effective platform for information and solidarity around critical advocacy issues can be created. The approach enables meaningful engagement between governments and civil society; increases accountability among stakeholders. It strengthens civil society through dialogue, and development of tools that facilitate action, and empowers communities to take ownership. Civil society, groups of women and PLHIV utilise the e-forum to contribute meaningfully to policy making processes in the country. The advocacy campaigns have supported the most vulnerable groups within society to have improved access to essential health and information services.

Next Steps: The intervention was successful in the central and northern regions of the country, and have received demand for expansion to the south and east. Namibia is the fourth country in the subcontinent to benefit from this initiative and the programme will be spread to other countries with similar profiles.

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MOPE0546
Scaling up HIV counseling and testing services around fishing communities of Bukakata and Ddimo land in Uganda
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Issues: Fishing communities of Lake Victoria are much more vulnerable to HIV/AIDS because of different socio-economic factors. Many people fish the island and shores of the Lake in search for employment, hiding after criminal partake in a community and social amenities. The major reason for high vulnerability include; Idleness, multiple sexual partners, migration following fishing patterns and drugs with alcohol abuse.

Description: The objective of reducing the HIV transmission rate by 50% through the existing number and conducting refresher courses to 20,000 adults, including 4,000 couples and their eligible children. Identify 5000 new HIV-positive people and offer them basic care and referral to care and treatment. Reduce the risk of HIV/AIDS infection in the population through appropriate prevention and counseling intervention.

Lessons learned: ART outreach is very crucial for effective outreach referral system. There is a need for on going support supervision of people testing HIV-positive and their families. Community Health workers are very important in mobilization of members through sharing their real life experiences with HIV and AIDS.

Next steps: Linking patients identified to other Health service providers like TASO Masaka, Uganda Carees and Kitobo Mobile for care and treatment. Train expert clients, to handle the increasing number of people testing HIV-positive.

Increase HIV/AIDS awareness campaigns for easy uptake of VCT in the community and distribute condom to all households.

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MOPE0547
Lesbian and bisexual women living with HIV claiming voice and visibility
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Issues: Needs of lesbians and bi sexual women living with HIV in the UK have been neglected through insufficient research and funding. Misconceptions by HIV positive lesbians and this community of their levels of susceptibility to HIV and other STI. Stonewall report(2008) shows this community being at high risk of mental ill health, experiencing multiple stigma having a high level of unmet needs. The resulting marginalisation constitutes a barrier to accessing healthcare. Further lack of knowledge among specific needs and referral agencies exacerbates this community's invisibility.

Description: Mobilising through: Open HIV-positive lesbians providing services. Research with this community through planned interventions: 21 instances of 1.2.1. peer support were delivered and a monthly support group. Structured assessment and monitoring, evaluation of services.

Lessons learned: The effect of existing health inequalities was lessened by involving female service providers. The effect of existing health inequalities was lessened by involving female service providers.

Next steps: Develop sustainability of services. Exchange experiences with similar European networks.

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MOPE0548
Stop talk listen - a new way to discuss safer sex?
M. Jonson1, C. Ode2

Issues: In our effort to find new ways to address HIV and STI prevention, RFSL has produced Stop Talk Listen—a party game that offers exciting poss-ibilities to reflect on sexuality and share experiences in an approving and non-moralising manner.

Description: Stop Talk Listen is an innovative way to work with HIV preven- tion within a group. Research has shown that group-level interventions are particularly effective, especially when combined as multi-component inter-ventions containing cognitive elements. Sexual norms are shaped, maintained and changed through social interaction between people. The intention of the game is to reach the players on different levels; in fantasy, thinking, dreams, identity and the experience of being your sexual self—how you live with your sexuality. Methods that move you to reflect, influence and deeply involve you to make a active choice are particularly effective.

Lessons learned: Stop Talk Listen combines knowledge transfer with more reflective questions about sexuality. The game itself is lead by a play-coach who is “one of the gang”. Several researchers emphasize that peer-education is a key factor in successful HIV prevention.

Next steps: A Swedish study about men who have sex with men (MSM) showed a need of education regarding HIV and STI’s. In developing the game, a priority question was, “How to communicate about your own and sex part-ners’ HIV status?” RFSL wanted to take the needs of talking about sex in the MSM group and adapt them to effective HIV prevention.

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177
MOPE0549

Reporting back to research participants: the response of religious organizations to the HIV epidemic in Malawi

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Issues: Religious organizations powerfully impact the lives of African villagers and often provide essential infrastructure in remote rural areas. But the role of these organizations in HIV/AIDS prevention and care is not fully understood. A 3-year research study funded by the US NIH investigated strategies used by five faith-based organizations (FBOs, Christian and Muslim) in Malawi to prevent the spread of HIV and to care for people living with HIV/AIDS (PLHIVs). Qualitative and quantitative data were collected from religious leaders, members of their FBOs, and PLHIVs. Supplemental research investigated the role of traditional healers in the HIV epidemic and their interface with religious organizations. Along the way, researchers learned from religious leaders that Malawians felt they were often “studied” but rarely were informed of research results.

Description: Two research dissemination conferences were designed to report the study findings to religious leaders, and 112 participants attended one or the other conference. Presentations focused on research findings on which the leaders could take action—for example, the finding that only 29% of members understood that mother-to-child transmission was a mode of HIV infection. A panel session with traditional healers was part of the conference, and a session in which the leaders gathered by faith groups to create action plans.

Lessons learned: The interfaith aspect of the conferences provided a venue for Christians and Muslims to work together and share ideas on important health issues affecting both communities. Issues related to gender and youth were especially meaningful topics. The session with traditional healers promoted constructive dialogue between the healers and religious leaders.

Next steps: Reporting results to study participants can reinforce their knowledge, empower their leadership, and motivate further FBO work on HIV prevention. Integrate research dissemination when possible into all studies.

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MOPE0550

Cultural deconstruction of a CPOL intervention on intermediate outcomes in Zimbabwe

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Background: The Community Popular Opinion Leader (CPOL) diffusion-based peer-to-peer HIV/STD prevention intervention is aimed at changing attitudes, norms, self-efficacy, condom skills, Asserting Rights of COPOL carried out in 5 countries found a significant decrease in STI incidence and unprotected sex with non-spousal partners over time, but this effect was different for intervention and control groups. It is important to examine how the intervention affected intermediate outcomes to better understand why there was no differential effect.

Methods: In Zimbabwe we collected survey data among 5,547 CPOL trial participants at baseline, 12- and 24-months (81% response rate). The Integrated Behavioral Model (IBM) was the framework used to design intermediate outcome measures: behavioral, normative and efficacy beliefs regarding diverse risk behaviors targeted. First, analyses were carried out to identify behavioral targets with strongest associations with safer sex behavior at baseline, which therefore should have been targeted by the intervention to increase safer sex behaviors over time. Second, we tested whether there was greater change in behavioral intention, intermediate beliefs (behavioral, normative, efficacy), and condom skills among CPOL intervention vs. control participants.

Results: Baseline data showed significant correlations of attitude, norm, and self-efficacy with intention to use condoms with steady partners; 13 behavioral, 4 normative, and 11 efficacy beliefs had significant associations with both intention and behavior. Longitudinal analyses found no differential change in intention; only 2 behavioral, 1 efficacy, and no normative beliefs showed greater change in the intervention group. Similar results were observed for other copers (e.g. non-concurrency).

Conclusions: Although COPOLs successfully increased conversations and condom skills, the intervention was ineffective in impacting intermediate outcomes, including key beliefs for behavior change. Implications will be discussed for enhancing the CPOL intervention to better train CPOLs to target key beliefs for behavior change.

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MOPE0551

Condom use and exposure to PSI/SFH’s HIV prevention intervention among young women with concurrent transactional partners in Trinidad

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Background: Young women are disproportionately affected by HIV/AIDS in Trinidad and Tobago. Recent studies suggest that HIV infections are six times higher among 15-19 year-old females compared to males. Concurrent transactional relationships are an important driver of the epidemic. In response, PSI-Caribbean/Society for Family Health (SFH) initiated a World Bank-funded HIV prevention program in Trinidad in 2008 to promote condom use among young women with concurrent transactional partners using peer education and mass media.

Methods: In February 2008, 121 young women (16 to 24) with concurrent transactional partners were recruited for a survey to identify determinants of condom use by respondents and barriers to condom use. Measures included demographics, sexual behaviors, behavioral determinants, and exposure to PSI/SFH activities. Multivariate logistic regression was used to identify the most significant independent variables associated with condom use at last sex with a transactional partner. Analysis of variance was used to estimate the adjusted means/proportions of each explanatory variable by condom use.

Results: Condom use at last sex was lowest with regular partners (46.7%) and higher with casual partners (78.7%) and transactional partners (77.3%). The majority of young women (68.3%) had participated in a PSI/SFH activity in the last 6 months. Condom use at last sex with a transactional partner was significantly associated with: perceiving that condoms were easy to get (<p = 0.05); considering it easy to always use a condom(<p = 0.01); and intending to use condoms with all partners (<p = 0.01); participating in a PSI/SFH educational activity including a hands-on practice with condoms (<p = 0.01).

Conclusions: Findings suggest that key determinants of condom use with transactional partners include availability and participation in hands-on activities. Future studies should examine individual, relational and structural barriers to condom use with regular partners and develop culturally appropriate strategies to promote condom use with all partners to further reduce HIV vulnerability among young women.

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MOPE0552

Loss experiences among HIV orphans in Central African Republic

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Background: A number of studies have been conducted on AIDS orphans’ loss experiences, which have raised the necessity for grief care. Very few of these studies, however, have focused on how AIDS orphans themselves feel about and deal with their loss experiences. The purpose of this study is to identify AIDS orphans’ loss experiences and help them develop their own narratives, so as to provide effective emotional support in the future.

Methods: A quasi-structured interview was conducted with 22 AIDS orphans in Boy Rabe District in Bangui, the capital of Central African Republic.

Results: Participants expressed their loss experiences in chronological order as follows: first, they described their past experiences as grief, regret, suffering, and suppression; now they complain of physical symptoms and suffer from nightmares and feelings of hopelessness; they cannot imagine a future without their parents, and they cannot expect any help. They hope for.

Conclusions: It became evident that the loss experiences expressed in time series by the orphans coincided with Bowlby’s psychological process of loss experience (protest-despair-detachment). This suggests children have the same loss experience specific to their stage of development, despite differences in their environments.

It can be said that many AIDS orphans are living with their loss experiences and grief, unable to be freed from them.

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MOPE0553

Positive living for a brighter future: adaptation of a sexual and reproductive health intervention for adolescents living with HIV in Kenya and Uganda

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Issues: While adolescents living with HIV (ALH) in sub-Saharan Africa face specific sexual and reproductive health (SRH) challenges there is a gap in evidence-based interventions tailored for this group. We describe the process of adapting an evidence-based primary HIV prevention curriculum to address the specific SRH needs of ALH in Kenya and Uganda in a culturally sensitive and age-appropriate way.

Description: A five-step approach guided the adaptation process. 1) We conducted an assessment of SRH needs of ALH in Kampala and Nairobi; 2) We assessed existing primary and positive prevention interventions against the following criteria: objectives, theory and methodology, criteria for effect-
Workplace programmes targeting FSW and their clients are both effective and increasing to 74.7% of reported commercial sex relations dropping to 35.9% and consistent use of condoms increasing to 74.7%. In a two-year period the programme showed significant results with self-reported at least one STI; and consistent use of condoms was less than 20%.

Issues:
- People in rural area are less aware and have less access to media due to culture, time and logistic reasons than urban set up. They continue to have misconceptions like taboo and wrong practice in health issues like HIV/AIDS. Media Mass plays effective role in increasing knowledge on HIV/AIDS prevention through enter-educative messages besides awareness and advocacy roles.
- Local level exhibition of short films make more effective understanding of message through participation of large group of people in community.

Description:
Save the Children USA, HIV/AIDS Sector, Dhaka, Bangladesh; UNICEF, Research, Dhaka, Bangladesh; Macra, M&E, Dhaka, Bangladesh

Next steps: We will translate the curriculum into local languages and carry out a pilot study to evaluate for acceptability and feasibility. Exit interviews and FGIDs will inform us of participants’ perceptions of the intervention.

Next steps: The ILO will work with UNAIDS partners and national AIDS programmes to scale up a targeted workplace approach in the Asia Pacific.

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Exhibition Poster

The Preventive ANRS 12127 Study Group: promising strategy for primary prevention of HIV in a conjugal context. use and communication regarding condom within marriage and could be a promising strategy for primary prevention of HIV in a conjugal context. Presenting author email: malteiry@kyniku.com

MPEO559
Involving street children in creating educational cartoons as an effective method of HIV prevention among street children in Kyiv, Ukraine
A. Shebardina

Description: Involving street children in creating educational cartoons as an effective method of HIV prevention among street children in Kyiv, Ukraine. Presenting author email: anastasia_shebardina@afew.org

MPEO560
Couples-oriented prenatal HIV counseling improving HIV-related communication among married Indian couples: results from the ANRS 12127 Prenatahst intervention trial

Abstract: Most HIV infections among Indian women occur as a result of their husband’s high-risk sexual behavior. Risk perception and risk assessment is low within marriage resulting in low HIV-related communication. Prenatashst ANRS-12127 is a multi-country randomized trial evaluating the impact of an enhanced prenatal HIV counseling session, namely couples-oriented post-test HIV counseling (COC), on partner HIV testing, couple HIV counseling and reproductive and sexual health behaviors.

Methods: 484 women were enrolled in the Indian site and randomized to receive either standard post-test counseling (SC) or COC. Longitudinal data was collected at baseline during the first ANC visit (TD), one month after post-test HIV counseling (T1), and will be collected at six (T2) and 15 (T3) months post-partum through structured questionnaires. We analyzed the impact of COC and associated factors on improving HIV-related communication within the couple at T1 using multivariable logistic regression.

Results: At enrolment, 46.1% of women reported having ever discussed HIV with their husband, with comparable rates among the two study groups (p=0.906). Among the 413 women seen at T1, 55.4% reported communicating about HIV since T0 specifically on modes of HIV transmission, mutual trust, importance of partner HIV testing and PMTCT. Communication about HIV in the year before enrolment was significantly higher among COC group than SC group in T1 (41.4% vs. 31.5% p=0.035). Having a renamuerated activity at enrolment (p=0.01) and moving to another city in the year of schooling (p=0.01) were also significantly associated with increased HIV communication with husband. After adjusting on these variables, COC remained a significant predictor of couple communication on HIV at T1 (OR =1.57 [1.03-2.40])

Conclusions: COC seems to be effective in improving HIV communication among married Indian couples and could be a promising intervention which can be implemented in routine prenatal care services. The main study outcomes will be presented at the conference and will be available online.

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MPEO561
“Keeping condoms in fashion” - increased prevention and awareness through a condom fashion design competition initiated by a Clothing and Textile Union (SACTWU) in South Africa
N. Sobol, J. Cockburn

Abstract: SACTWU Worker Health Program initiated a bold intervention that targeted blue-collared garment workers (predominantly women of child-bearing age) and “upper-middle class” youth by combining HIV prevention and fashion. Description: A competition was held whereby students at fashion design schools throughout the country were invited to submit condom garment designs on storyboards with a narrative outlining their design inspiration and link to HIV. The top garments were shown case and judged at an event held during Cape Town Fashion Festival two weeks prior to World AIDS Day 2009. The Garments were modeled to an audience of 700+ attendees, including friends and family. The campaign was well received by the media and included coverage by a satellite news station and a number of national daily newspapers. Winning garments were also showcased at fashion schools’ annual end of year fashion shows, each attended by up to 500 individuals. The SWHP was then invited by a leading clothing company to present the garments for the week over World AIDS Day. A stand was set up and manned by trained lay counselors. HIV prevention and awareness take-home materials were distributed together with a total of over 8000 condoms.

Lessons learned: This campaign illustrated the effectiveness of identifying and targeting a clear target market for an awareness campaign and linking the theme of the campaign to something that is familiar and specific to the target market. This approach engendered a great deal of interest and successfully reinforced prevention messages.

Next steps: A curator of Iziko museums has requested that the garments be included in an HIV art roadshow to be held in a number of African countries throughout 2010. Presenting author email: nikki@swtzn.co.za

MPEO562
Peer education: a key to addressing ignorance and high HIV prevalence and infection among MSM in Nigeria
A. Dike

Background: Peer education has been an established method of addressing the challenges of ignorance and ignorance is not only detrimental but a major factor affecting risk perception to HIV that undermines the capacity of MSM organizations to operate sustainable programs especially when they are excluded from program designing.

Methods: HIV/AIDS basic facts, correct and consistent use of condoms and lubricants, management of STI, positive living and stigma reduction is done through peer education among care providers to address the specific MSM friendly services is a major challenge. education on HIV/AIDS basic facts, care and support, sensitation programs at community level, access to HCT and STI management are few among MSM, ignorance is not only detrimental but a major factor affecting risk perception to HIV that undermines the capacity of MSM organizations to operate sustainable programs especially when they are excluded from program designing.

Results: Alliances rights nigerian, an MSM, CSD in partnership with heartland alliance: a USAID funded program is addressing this gap, peer education is used to reach MSM at community level. capacity building to educate MSM about HIV/AIDS basic facts, correct and consistent use of condoms and lubricants, management of STI, positive living and stigma reduction is done by MSM peer educators, as a result MSM attitude, practice and HCT uptake is increasingly improving, peer educators work with health care providers to ensure their peers get friendly and quality services. Lessons learned: Sustained peer education for MSM using the MSM at grass-root level can improve understanding and risk perception.

Next steps: The national agency for the control of aids (NACA) should develop specific sexual minority interventions especially those that target MSM. Peer education among MSM should be integrated into all programs at all grassroots level can improve understanding and risk perception to HIV that undermines the capacity of MSM organizations to operate sustainable programs especially when they are excluded from program designing.

MPEO564
Brothel based education facility for children of female sex workers (FSWs): Karachi, Pakistan
M. Amjad, M.S.K. Pasha

Description: None of the preventative measures taken by government or non-government organizations has been successful in tackling this rampant issue as it has been ingrained into the culture of the society.

Methods: We established a brothel based education facility for children of FSWs. The facility is located in the heart of the red light area. Daily, the facility is attended by 30 children. The facility offers HIV/Aids education among care providers to address the specific MSM friendly services is a major challenge. education on HIV/AIDS basic facts, care and support, sensitation programs at community level, access to HCT and STI management are few among MSM, ignorance is not only detrimental but a major factor affecting risk perception to HIV that undermines the capacity of MSM organizations to operate sustainable programs especially when they are excluded from program designing.

Results: During first six months of its operation, the facility has been attended by 358 children of FSWs. None of the children reported ever discussing HIV with their parents. The majority of children reported a strong desire to attend the facility in the future.

Conclusions: Creating a safe space for children of FSWs to discuss their fear and ignorance about HIV/AIDS is urgent. This approach is working in an environment that prioritizes the rights of the children. We hope to secure more funding to expand the facility to meet demand.

Next steps: The facility will continue to operate as a model for other similar facilities. Lessons learned: Addressing the challenges of ignorance and the high HIV prevalence and infection among MSM in Nigeria.

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Monday 19 July
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Tuesday 20 July
Author Index

180
Next steps:
WLHA have confidence to express opinions about sex. Power WLHA to communicate about and negotiate sex requires that three skills to see their self-worth, appreciate themselves, to see making love as Lessons learned:
culture and society.
Next, a peer-to-peer curriculum was developed. The WLHA network recruited conducted to help identify and prioritize the barriers to safe and good sex. Long-term safe sex requires that the components emphasized in their intervention (e.g., partner communication skills) are responsible for behavioral changes observed post-intervention. Therefore, we examined the mediating role of partner communication on African-American adolescent females’ condom use post-participation in a demonstrated effective HIV risk-reduction intervention.

**MOPE0567**
Adventages of expanding HIV workplace programmes into comprehensive wellbeing workplace programmes
H. Tiff, N.A. Addo, M. Hammond, K. Akuahene

**MOPE0568**
Behavioral risk in early adolescents with HIV-positive mothers
A. Memon

**MOPE0569**
Working with the positive women’s network in eastern Thailand: reproductive and sexual health
A. Gummin, S. Bapot

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**MOPE0567**
The mediating role of partner communication skills on condom use among African-American adolescent females participating in an HIV prevention intervention
J. Sales, R. DiClemente, G. Wingood, E. Boser, J. Hardin

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**MOPE0566**
Working with the positive women’s network in eastern Thailand: reproductive and sexual health
A. Gummin, S. Bapot
MOPE0569
Feasibility of recruiting young South African couples into a relationship-based intervention for HIV and STI prevention

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Background: Project CONNECT is a relationship-based HIV prevention intervention for couples, effective in reducing HIV risk in the US. The 6-session intervention focuses on couple communication and reduction of sexual health risks. Given the call for couples based HIV prevention and the lack of interventions for couples in sub-Saharan Africa, we adapted the intervention and tested it for feasibility and acceptability among South African couples.

Methods: Couples were recruited from an inner-city STI clinic in Johannesburg and services offered in the community. Eligibility criteria included: women ages 18-30 and men 18-40 years, unprotected sex in the past 30 days and not reporting intimate partner violence (IPV) in past 6 months. Data were collected on the number of couples contacted about the programme, the number screened and enrolled. The analysis identifies challenges to recruiting couples and offers some lessons learned.

Results: Seventy-three couples expressed interest in study participation and provided contact information. Twenty-eight couples were not reachable, despite repeated attempts. Of the 45 couples we were able to contact and screen, 14 couples (31%) were eligible and enrolled into the study. 12 couples (27%) were not eligible to participate due to reported IPV. Other reasons for lack of participation included: outside the age range (n=3 couples); lack of interest (n=3); lack of availability for intervention sessions (n=3); illness (n=2); language issues (n=1); relationship ended (n=1); unknown reasons (n=6). Enrollment was enhanced when screening was conducted telephonically.

Conclusions: Recruitment of South African couples into a couple-based intervention for HIV prevention is feasible. However, there are challenges; particularly the high contact to enrollment ratio (about 3:1), suggesting that couples were less willing to participate than they had originally indicated. Of concern was the high level of IPV, indicating that this be addressed in couples interventions rather than used as screen out criteria.

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MOPE0570
Employing creative jewelry making to break the silence and stigma surrounding risky behaviours to HIV/AIDS among out-of-school slum girls in Uganda

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Issues: Risky sexual activities such as commercial sex, unprotected sex and drug abuse continue to be number one driver of HIV transmission among young people in Uganda. The Demographic and Health Survey 2006 states that young adults, 15-19 years in urban areas are more likely to have higher risk sex than other age groups, yet young girls are among those trapped in poverty and sexual exploitation that expose them to contracting HIV/AIDS. They have limited access to friendly reproductive health information and services that reduce vulnerability to HIV/AIDS and enable girls make informed choices.

Description: Jewel Girls is an income generation and art therapy program that gives girls (12-24 years) a chance to break the silence surrounding sexual exploitation and HIV/AIDS, learn facts on HIV/AIDS in a supportive space while using recycled paper to make jewelry for economic empowerment. Implemented by Uganda Youth Development Line, the project has worked with 100 girls who have been victimized by HIV/AIDS, sexual exploitation and/ or poverty. Supported by a trained counselor, the girls meet twice every week to make jewelry, learn life-skills, share stories and find strength in their shared experiences and new skills to keep safe from HIV/AIDS and live positively with it. The jewelry is sold and profits help girls rebuild independent lives.

Lessons learned:
- Jewelry making is a creative way of making safe spaces for vulnerable girls to break the silence surrounding sexual exploitation and living with positively with HIV/AIDS as each one supports one to overcome their challenges.
- Friendly spaces help counselors understand situations of affected girls, promote positive behavioral change and help girls learn social and economic skills that will help them from high risk sexual activity.

Next steps: Integrating HIV/AIDS messages into art therapies is a creative way to address stigma and increasing access to youth-friendly information and services that reduce vulnerability to HIV/AIDS and enable girls make informed choices.

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MOPE0571
The role of Kilimani Sesame on Tanzanian preschool children’s understanding and attitudes related to HIV/AIDS

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Background: Many Tanzanian children face hardships related to HIV and AIDS. Besides concerns over their own and family members’ health, a huge number of Tanzanian children suffer from poverty, neglect, violence, and poor health. In 2008, Sesame Workshop launched a multimedia pilot project in Tanzania, funded by USAID. The produced program, Kilimani Sesame, had several curriculum goals, including increasing knowledge and reducing stigma around HIV/AIDS. To offer age-appropriate lessons and address these goals, Kami (an HIV-positive, orphaned Muppet®) was prominently featured.

Methods: Research, using a quasi-experimental design, examined the impact of Kilimani Sesame. Baseline data collection occurred in the rural district of Kisarawe and the urban city of Dar es Salaam. Then, children were randomly assigned to either low or high exposure groups. Follow-up interviews were done after a six-week intervention.

Results: 223 children, from resource-poor households and an average age of 5.9 years, participated. To assess receptivity, researchers asked children to identify Kilimani Sesame characters. Children with low exposure named fewer characters than those with high exposure (t = 2.2, p < 0.05). Multivariate regression models were estimated and receptivity was a significant predictor, even after controlling for the children’s baseline scores, sex, age, location and general media receptivity. The variable set explained 15% and 21% of the variation in HIV/AIDS knowledge (F = 6.0, p < 0.001) and HIV/AIDS attitudes (F = 8.7, p < 0.001), respectively.

Conclusions: This study offers evidence that among Tanzanian preschool children, receptivity to Kilimani Sesame can result in knowledge gains and attitude changes. Besides being better able to describe HIV/AIDS, children with greater receptivity were more likely to say that a child could play with others or share a meal with an HIV-positive person. Based on these findings, additional health-focused media interventions should be developed and delivered, especially for children facing hardships associated with HIV/AIDS.

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MOPE0572
Determinants of condom use among subgroups of men who have sex with men in Myanmar: need for adapted health messages

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Background: While HIV prevalence among the male general population in Myanmar is 2.5%, among men who have sex with men (MSM) it reaches 28%. PSI/Myanmar is implementing a program addressing MSM needs and in 2008 conducted a baseline survey among MSM, to measure condom use and its determinants.

Methods: A cross-sectional study was conducted among 18-49 year-old MSM from 29 cities across Myanmar who reported having anal sex within the last 12 months. Participants were selected using simple random sampling and a structured questionnaire was used for data collection. “Correct and consistent” condom use was defined as the systematic use of a condom through the whole duration of the intercourse.

Results: A total of 1,179 MSM were interviewed. MSM were categorized, based on self reported sexual practices. Correct and consistent condom use was reported by 44.3% of MSM practicing insertive anal sex versus 40.5% of MSM practicing receptive anal sex. Correct and consistent condom use were significantly more likely to remember to use condoms before having sex (p<0.001), believe that their life would be shattered if they got HIV (p<0.001), and perceive condoms as easily available and consistent if they got HIV (p<0.001), and perceive condoms as easily available and consistent if they got HIV (p<0.001).

Conclusions: Study results informed health behavior communications and provide baseline data for program evaluation. Communications for MSM practicing insertive anal sex were designed to target improving perceptions of condom availability. Among MSM practicing receptive anal sex, communications encourage condom use regardless of physical characteristics or trust in a partner.

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MOPE0573
Sexual communication and women empowerment: an experience of the voices and choices of women living with HIV/AIDS project phase III (2007-2009)

R. Phirochali, S. Talaye
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Issues: In Thailand, good news are expected to be naive. Talking about sex means ‘experienced’ or ‘bad’. Thai men may use condoms with sex workers, but not with their spouse. It is very difficult for women to negotiate condom use. This increases vulnerability of women on top of other factors putting them at risk for HIV infection. Increased ability in sexual communication and...
relationship management between women and their spouse is needed. **Description:** The Voices and Choices project created an enabling environment for women living with HIV/AIDS (WLHAs) to learn about sex, gender, sexuality, and power relations among men and women. A peer-to-peer curriculum was developed to become an effective tool to empower other WLHAs. More than 300 WLHAs were empowered to be peer educators and more than 1,000 WLHAs benefited. The peer-to-peer process transformed vulnerable WLHAs to be empowered, sharing safe and pleasurable sex with their partners and to be able to request better RH services from providers. The curriculum was selected as the best practice programme for the SRH service provision training programme of the Department of Health, and some core WLHAs became its trainers. The project was also selected as the ‘best practice’ case of Thailand for the UNGASS reporting period 2008-2009. **Lessons learned:** The curriculum and learning process are developed by WLHAs to respond to their own problems. Sexual communication is identified as a necessary part of life with SRH, and not as a shameful practice. Sharing experiences with equipped information in an agreed safe space as well as sensitivity to responses is crucial. **Next steps:** The network of WLHAs is now engaged in a movement for expanding and enhancing the ability of women in sexual communication. Policy advocacy is also a key part. External supports are required to strengthen internal efforts to step forward for this challenging work. Presenting author email: stalawat@gmail.com

**MOPE0574**

The effectiveness of social marketing campaigns in changing HIV/STI-related behaviour among MSM in Australia

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**Background:** Evidence for the effectiveness of social marketing for HIV/STI prevention is mixed. There is debate about the most appropriate outcomes to assess, and the time needed to measure changes in outcomes such as health seeking and risk behaviours, community awareness, and ultimate program objective using social marketing campaigns. It is necessary to establish appropriate aims and consider appropriate outcomes to assess campaign effectiveness.

**Methods:** To evaluate HIV prevention social marketing campaigns in the Australian state of Victoria we assessed knowledge, health seeking and risk behaviors, community awareness, and ultimate program objectives using a mixed methods approach. We assessed appropriate aims and consider appropriate outcomes to assess campaign effectiveness.

**Results:** Campaigns were found to be effective in increasing knowledge, health seeking and risk behaviors, community awareness, and ultimate program objectives using social marketing campaigns. It is necessary to establish appropriate aims and consider appropriate outcomes to assess campaign effectiveness.

**Conclusions:** Campaigns were found to be effective in increasing knowledge, health seeking and risk behaviors, community awareness, and ultimate program objectives using social marketing campaigns. It is necessary to establish appropriate aims and consider appropriate outcomes to assess campaign effectiveness.

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**MOPE0575**

Impact of a couple-oriented prenatal HIV counseling session on condom use and communication among stable couples in the Dominican Republic: preliminary results from Prenahstet ANRS 12127 randomized trial

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**Background:** An international randomized trial (Prenahstet ANRS 12127) is assessing the impact of a couple-oriented prenatal HIV counseling session (COC) compared to standard prenatal HIV counseling with the following objectives: to evaluate the effects of the prevention strategies on contraceptive use and communication behaviors within different socio-cultural settings. The COC intervention was designed to enhance standard prenatal HIV counseling by building women’s skills to discuss sexual and reproductive health topics with their stable partners, including, among other issues, proposals and negotiating condom use.

**Methods:** The study was conducted in the Dominican Republic (DR) site, 484 pregnant women with stable partners were recruited after group pre-test HIV counseling on their first antenatal care visit (April-August 2009) and randomized to receive either their standard individual (SC) or COC same-day post-test HIV counseling.

Baseline data (T0) were collected before the intervention. 403 participants (83.3%) completed the first follow-up (T1) questionnaire (mean=6.3±3.4 weeks between measurements). Participants were asked to complete a couple communication regarding condoms and the incidence of condom use with current partners reported at T1 in SC and COC groups, with p<.05 considered significant.

**Results:** More women in the COC group discussed condom use with their partners (72.4% vs. 58.8%, x²=4.83, p=.035) following the post-test counseling. Participants were also reported more information to their stable partner with their stable partners (13.2% vs. 5.1%, x²=4.52, p=.04) since baseline.

**Conclusions:** The preliminary results suggest a positive impact of the COC session on motivation and empowerment of pregnant women to discuss and achieve condom use with their stable partners. COC might have an effective intervention not only to prevent Parent-to-Child Transmission (PPTCT) but also to reduce sexual transmission of HIV and other sexually transmitted infections within stable couples in DR, where reported condom use rates are consistently very low. Supported by: ANRS, EGRAF, Miami NHFI Fogarty International National Training Program (D43TW00017).

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**MOPE0576**

Knowledge, attitudes, beliefs and practices in HIV/AIDS in India: gender and urban-rural differences

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**Background:** In India, despite increasing efforts to promote the use of preventive measures and raise awareness regarding HIV/AIDS, recent studies have indicated that the virus has moved from urban to rural areas and from high risk to general population, disproportionately affecting the youth. This has raised concerns regarding the level of awareness, beliefs and practices in HIV/AIDS in the general population.

**Methods:** Data from the cross-sectional, population-based NHFS-3 Survey 2005-06 was used. In this study, information collected during the course of the survey fieldwork on 87961 women aged 15 to 49 years and 4417 men aged 15 to 54 years was used in the final analysis. The data collected was stratified by gender and urban versus rural. Analyses of the outcome variables i.e. knowledge, attitude, belief and practice were conducted using a χ² test to calculate significant differences among proportions of categorical variables.

**Results:** In our analysis, we found that knowledge of HIV transmission and prevention was low among women and men. Most of the respondents had a non-discriminatory attitude towards PLWHAs and majority agreed that children should be educated about HIV/AIDS. The use of contraceptives and proportion of respondents who had undergone HIV testing was found to be significantly low. We found a significant gap in the beliefs of the respondents regarding ways to avoid HIV/AIDS. Amongst our respondents, mass media was the most common source of information on HIV/AIDS.

**Conclusions:** There are significant gender and urban-rural differences in India in terms of knowledge, attitude, beliefs and practices in HIV/AIDS. Information dissemination in India should be designed in a way that not only raises the level of awareness but also bring about behavioural change.

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**MOPE0577**

Environmental risk factors and risky sexual behavior outcomes: a case study of the unmarried women of Congo

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**Background:** The goal of this study was to examine environmental risk factors for risky sexual behaviors and, using an attitude measure designed specifically for unmarried woman, determine the mediating effects of attitude between risk factors and risky sexual behavior outcomes. This study was based on the socio-cultural and socio-economics’ approaches. Two aspects of sexual behaviors have been retained: the multipartnership and the non-use of condom at the last sexual intercourse.

**Methods:** The data are from the first Congolese Demographic and Health Survey, the analysis is restricted to 2074 never married females ranged in age from 15 to 49, who ever had sexual experience, completed the interview, and had a valid HIV test result. Both descriptive and multivariate methods are used to assess the effects of each socio-cultural and socio-economics’ factors when the effects of place of residence, age and age of sexual debut are controlled statistically.

**Results:** The results of the descriptive analysis show that 62% of the respondents have ever had more than one sexual partner and more than 78% of these did not use condom at the last sexual intercourse preceding the survey. The multivariate results indicate that those who have access to the media, those of high socio-economic status and high education and those who were well informed about AIDS, were more likely to use condom at the last sexual intercourse. If they and their counterparts who did not have access to media or had less education and those who were not well informed about AIDS, were more likely to use condom at the last sexual intercourse (83.3%) completed the first follow-up (T1) questionnaire (mean=6.3±3.4 weeks between measurements). Participants were asked to complete a couple communication regarding condoms and the incidence of condom use with current partners reported at T1 in SC and COC groups, with p<.05 considered significant.

**Conclusions:** The preliminary results suggest a positive impact of the COC session on motivation and empowerment of pregnant women to discuss and achieve condom use with their stable partners. COC might have an effective intervention not only to prevent Parent-to-Child Transmission (PPTCT) but also to reduce sexual transmission of HIV and other sexually transmitted infections within stable couples in DR, where reported condom use rates are consistently very low. Supported by: ANRS, EGRAF, Miami NHFI Fogarty International National Training Program (D43TW00017).

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MOPE0578
Workplace intervention through life skills education in garment industries of Bangladesh: an effective and sustainable model on HIV/AIDS prevention

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Issues: Three million workers are engaged in garment industries of Bangladesh. A needs assessment study conducted for garment workers revealed that most of the workers are young unmarried females, have migrated from the rural areas with poverty and low literacy. Almost one-fifth of the male workers have had extra-marital sex and very few of them used condom during the last sex act.

Description: Considering the high risky behaviors among the garment workers, the HIV and AIDS prevention project supported by Global Fund funded a consortium led by Marie Stopes Society to implement Life Skills Education (LSE) on HIV/AIDS and STI at workplace. The strategic partner of this consortium is Bangladesh Garment Manufacturers and Exporters Associations (BGMEA), which is an apex body of the garment owners in Bangladesh. The intervention comprises of development and endorsement of LSE policy and workers’ training on communication materials, and workplace LSE sessions for garment workers. Trainers and peer educators selected from garments factories provided LSE on HIV/AIDS and STIs to 66,000 workers and developed and endorsed LSE policy on HIV/AIDS. Monitoring findings from the interview with the workers showed that the knowledge on both HIV/AIDS and STIs has substantially improved. Regression analysis from the quality monitoring says age between 21-25 years (p<.10 and p<.01), read newspapers (p<.01 and p<.01) and participated in the LSE training program (p<.05 and p<.10) influenced knowledge of transmission and prevention of HIV/AIDS.

Lessons learned: If HIV/AIDS issues are incorporated in compliance checklist, present workplace based LSE intervention has to be continued with supports from development partners, to mitigate the risky behavior of garment workers.

Next steps: Until HIV/AIDS issues are incorporated in compliance checklist, present workplace based LSE intervention has to be continued with supports from development partners, to mitigate the risky behavior of garment workers.

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MOPE0579
The role of traditional leaders in sexuality education in schools - an UNESCO experience in Kenya

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Issues: Sexual debut in Kenya continues to decline, yet socio-cultural attitudes acts as hurdle in furthering discussions on sexuality for young people. This affects the availability of effective sexuality education making it difficult for the young people to acquire knowledge, skills and behaviour that reduces HIV infection. Kenya AIDS Indicator Survey 2007 notes that only 25% of sexually active School boys (15-18years) used condoms during their last intercourse.

Description: Although the Kenya Ministry of Education (MoE) introduced Life Skill education curriculum to prevent HIV infection among the young people, recent studies shows that there has not been significant change. Teachers face dilemma in promoting sexual behaviour change without mentioning safe sex due to political and religious sensitivity. This is in contrast to African traditional sex education systems which prepares young people on how to handle sexuality prior to marriage. In some communities young people are taught to practice a restricted form of intimacy to ensure their sexual instincts are not suppressed (Kenyatta 1965). To prevent HIV infection, UNESCO has successfully lobbied the MoE into acknowledging that the issues of sexuality among the learners need to be discussed openly. This paper will focus on UNESCO’s advocacy work among the traditional leaders in Kenya on the need to confront sexuality based on UNESCO’s Technical Guidance on Sexuality Education.

Lessons learned: MoE’s effective response to HIV prevention among the youth could benefit from traditional leaders support for sexuality education. These calls for innovative evidence based advocacy approaches to ensure that traditional leaders become supportive of sexuality education in schools.

Next steps: The next step involves: (1) Conduct a rapid assessment on social-cultural factors (2) Scale this initiative for wider national level implementation (3) Lessons learnt for further use in evidenced based policy formulation.

Support MoE to advocate for sexuality education.

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MOPE0580
Life skill education (LSE) at workplace: a unique approach for preventing HIV and AIDS amongst garment workers in Bangladesh


Issues: Garment sector is considered as backbone of Bangladesh economy which constitutes 78% of foreign currency. It has provided employment opportunities for 3.5 million people. The baseline assessment conducted under Global Fund supported HIV project in 2008 revealed that most of the employees are young (mean age 23), about 85% are female and came from neighboring districts with poor literacy level. 90% of them don’t have knowledge about HIV and AIDS and 20% know a few about STIs. Also, they spend most of their time in their workplace and there are high possibilities of peer-to-peer relationships which makes them vulnerable to HIV and AIDS.

Description: On the basis of assessment findings, Young Power in Social Action (YPSA) consortium has been implementing a workplace based Life Skill Education (LSE) program to the garment workers in Chittagong Division under Global Fund supported HIV/AIDS Project in Bangladesh. 15 NGOs are working as Strategic Partners for implementing activities at field level and YPSA providing ToT to 30 Master Trainers (MTs). The MTs trained 338 Peer Educators (PE) from garment factories workers. Gradually 750 PE is providing LSE to 366,000 Garments workers at workplace. Intensive advocacy efforts are done with Bangladesh Garment Manufacturers and Exporters Association (BGMEA). As a result, knowledge about STIs, HIV and AIDS has significantly increased, stigma and discrimination associate with HIV and AIDS is workplace is reduced, self-esteem of the workers has increased and a HIV/AIDS workplace LSE policy is endorsed by BGMEA.

Lessons learned: • Active involvement of BGMEA mitigates challenges of project implementation and creates ownership • Integration of workplace interventions with the existing social welfare programs of the factories brings greater success

Next steps: Intensify program components based on the felt needs i.e., introducing reproductive health services health & hygiene, stress management, occupational health etc.

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MOPE0581
The sex worker health provision programme in Zimbabwe: experiences and lessons learned

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Issues: A situational analysis conducted in Zimbabwe in 2006/7 by National AIDS Council and partners indicated that cities and trading centers along/or near major highways are characterized by extensive sex work (SW) and mobile populations. Their HIV infection rates are likely to be higher than general population. While national policies include SWs, because SW is illegal, SW programmes and research remain limited. A pilot SW programme was nested within the Zimbabwe National Behavior Change Programme (one urban and one highway setting).

Description: The project aimed to: (i) reduce SW HIV acquisition; (ii) reduce HIV transmission to SW clients; (iii) improve SW reproductive health (RH); (iv) improve SW rights through collectivization, education, condom promotion and provision of STI and RH health services (including VCT). A SW drop-in centre was established in Harare plus a mobile programme along one major highway. Prior to implementation, meetings were held with SWs and stakeholders to learn of their concerns. Peer educators were recruited and trained. 317 SWs were seen within 3 months. To date 58% have been tested for HIV (minimum HIV prevalence 33% Harare, 44% on highway). STIs are common (41% STI syndromes).

Lessons learned: SWs are a vulnerable group who are keen to access to RH services. Peer educators successfully recruited women and provided community-based health promotion. Women seen in Harare were older and at lower risk than those on the highway suggested recruitment of younger, higher risk women in this setting. Despite provision of free legal services including access to victim-friendly police services, women express reluctance about use. Due to perceived discrimination by public sector, SWs would like services to include HIV care.

Next steps: The programme is being expanded to incorporate major towns and highways across Zimbabwe. Research to better describe the population and its vulnerability is planned.

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MOPE0582
Intervention based knowledge gained regarding high-risk behaviour of HIV-positive widows and single men in care setting - Chennai Tamlilnadu

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Issues: The Government Hospital of Thoracic Medicine (GHTM), Chennai, treats the largest number of TB/HIV patients in India - 40% come to access free TB treatment. The hospital also acts as a home for their subsequent monthly visits and to collect their medicines. Many HIV-positive widows from rural areas hide their status back home due to great stigma and travel great distances to the hospital. Many rely on male co-partners and those traveling in the same direction for transport and this often evolves into a more complex relationship - often involving unprotected sex.

Description: A counselor alerted Nalamdana, the local NGO working on-site using entertainment education, to this problem. Nalamdana devised and enacted a role-play outside the ART outpatient clinic, where 300 people access free ARV treatment daily. Non-judgmental information on prevention of STIs and HIV re-infection was discussed. Importance of condom use was particularly stressed. Into this notional interactive session with counselors, the audience asked many questions reflecting their own anxieties related to this issue.

Lessons learned: Out of 12 role plays performed (Oct - Dec, 2009), eight covered condom use and risk reduction. Of the questions asked post drama, around 70% related to condom use in casual relationships and prevention of re-infection. A pre and post intervention survey showed significant increase in knowledge about risk of STI and HIV re-infection. Evaluation study also showed that in their self-efficacy around number of desirable HIV/AIDS related behaviours, there were significant increases in the proportion of respondents saying they would use a condom. Not exposed to Nalamdana program: 5.7%. Exposed to Nalamdana Program: 13.4%.

Next steps: Nalamdana covered same messages through cable radio (internal, external) to reinforce the messages. Inclusion of discussion about positive prevention at regular support group meetings for men and women would further strengthen the programme.

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MOPE0583
HIV prevention with at-risk youth in “hot zones” of Central Asia: using evidence to reduce sexual and injecting risk behaviours in Kazakhstan

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Background: The HIV/AIDS epidemic in Central Asia is driven primarily by injecting drug use, with high rates of HIV infection among major at-risk populations (injecting drug users, sex workers, prisoners, men who have sex with men and migrants). This is heightened along the drug trafficking routes that run from Afghanistan through to Kazakhstan.

The purpose of this study is to provide information on high-risk behaviour among at-risk-youth who live in urban “hot zones” of Almaty, Shymkent and Karaganda (Kazakhstan) for prevention programming. “Hot zones” are areas with a high concentration of injecting drug use and commercial sex services, thus exposing youth to an increased risk of HIV transmission.

Methods: The project conducted a baseline cross-sectional household survey in November 2009. Multi-stage probability sampling strategy was used to identify 15 wards and 261 households. Project staff conducted an interview with the primary caregiver of each surveyed household.

Results: Among the youth surveyed, 50.9% reported being sexually active, 18.2% of them reported having friends who have injected heroin at least once, 54.9% of those sexually active reported using condoms at last intercourse. 9.4% had ever injected heroin. Only 41.2 reported that condoms are available, 46.8% reported that injectable drugs are available in the immediate living area and 15.2% intended to try injecting drugs if proposed by friends.

Conclusion: Youth who live in “hot zones” are at increased risk of becoming drug users. Drug use is also associated to sexual HIV transmission, as only half of sexually active youth had used condoms at last sex. Information gathered through this study will be used to adapt HIV prevention messages focusing on increased awareness of injecting drug risks, promotion of condom use and strengthening of negotiation skill among youth to refuse injecting drug initiation and to insist on condom use.

MOPE0584
“Changing the river’s flow”: challenging gender dynamics in a cultural context to address HIV

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To reduce incidence of HIV and prevent new infections, SAARIDS, in partnership with 35 partners in nine countries addresses inter-linkages among GBV, culture, women’s rights and their influence on HIV incidence.

The project uses a “train the trainer” and a comprehensive training package to build trainer’s capacity. 27 regional trainers were trained, they trained 108 national trainers who in turn trained 1,240 community based volunteers (CBVs) on GBV in key countries.

Partners in Botswana, Lesotho and Malawi launched Cultural Dialogues. After sensitization of stakeholders, with the help of the CBVs, the project and obtaining buy-in, facilitators engage with community members. In three rounds, with men, women, and in mixed sex groups, participants discuss community-specific drivers of HIV GBV and identify viable strategies to reduce incidence, while practicing their cultures.

There’s expanding knowledge about HIV, the role of WVN in transmission and risks in certain cultural practices. VCT and reported condom use have increased, sex workers report feeling more empowered.

Communities are more willing to interrogate cultures and to abandon/modify high risk practices, e.g. communities discussed forced widow inheritance as violating women’s rights. Although unwilling to abandon widow inheritance totally, they suggested VCT for both widow and prospective husband, and widow’s consent as a prerequisite.

Custodians of culture’s involvement encourages greater participation, and participation of men in particular, commitments are more likely to be kept.

Partnerships, between regional, national and community based organisations/Institutions are key to successfully implementing community based programmes. The project is uncovering community-specific information on the drivers of HIV, adding to what is known about local epidemics.

Presentation abstract: In-country similarities and variations in cultural practices will allow better understanding of the epidemic in southern Africa, to inform policy and interventions. Scaling up and replication, and follow-up support for communities, especially for behavior change sustainability are key. Presented author email: maseame@saarids.net

MOPE0585
An evaluation of the influence of a home based HIV/AIDS counselling and testing program on the attitudes of men in the Eastern Cape towards HIV/AIDS counselling and testing - one year later

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Background: Following evidence of low uptake of voluntary counselling and testing services by South African men from sources, including health facility records, the District Health Information System and results of the 2003 South African Demographic Health Survey, the Catholic Medical Mission Board (CMMB) conducted a baseline knowledge, attitudes and practices (KAP) survey between October, 2008 and February, 2009 in order to determine if these were the factors which influenced this outcome amongst men in South Africa. The results of the KAP survey were used to guide the implementation of a home-based HIV/AIDS counselling and testing program called Men Talking Action (MTA), which focuses primarily on providing HIV/AIDS counselling and testing to men at their homes, including their families. The program was implemented in the Eastern Cape Province of South Africa in October, 2008 (Figure 1.). However, counselling and testing activities only commenced in March, 2009.

Methods: Guided by the findings of the KAP survey, a simple client questionnaire was designed for the collection of client demographics, counselling and testing data. It has been used to guide daily client interviews by the counselors and nurses basis. The data is then entered onto an Excel database, thus enabling data analysis. The target population is men between the ages of 12 and 65, living in the Amathole District of the Eastern Cape. The sample consisted of all 2437 men who had received HIV/AIDS counselling between March and September, 2009.

Results: Of the 2437 men counselled, 2103 (86%) agreed to test for HIV/AIDS (Figure 2.), as well as undergo screening for other sexually transmitted infections and tuberculosis. Furthermore, all of those tested reported being in favour of home-based counselling and testing.

Conclusion: Although it may still be early into the program, the results of this first year program evaluation have revealed that men have positively embraced home-based counselling and testing.

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MOPE0586
Community role models as change agents for HIV prevention behavior change among married persons in rural Uganda

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Background: High levels of HIV and sexually transmitted infections (STI) issues: While Uganda experienced prevalence reduction from 18% in the early 1990s to an estimated current average of 6.4%, rising incidence (43%) of new infections among married persons and those in long-term sexual relationships, (UAC, 2007) presents a persistent challenge. AIDSRelief, Uganda, in its efforts to contribute to incidence reduction in this at risk population, is promoting a role model strategy as an effective approach to communicate HIV prevention messages to married persons and those in long-term sexual relationships.

Description: AIDSRelief applies “The Faithful Housewife” behavior change curriculum for married couples. This curriculum builds couples’ capacity in communication and conflict resolution, in the context of HIV Prevention. Faithful couple role models trained to facilitate this curriculum were selected from married couples in communities surrounding health facilities. Faithful couple role models were trained to facilitate this curriculum were selected from married couples in communities surrounding health facilities.

Results: Communities of faith model: a “good” marriage, educated church, effective contraception, reduced STI and condom use, reduced forced widow inheritance and culture, faith and trust. Selection criteria for married couples trained to fa-
MPOE0587
Don’t say a word! Is ‘silent’ messaging effective?
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Issues: Frequently, the noisiest places are the best areas to reach a wider audience with behaviour change messaging. Extreme noise levels often result in the message being missed.

Description: Mindset Health is a not-for-profit organisation concerned with developing educational and awareness materials in South Africa. The main target audience is the public and attendants of public health clinics. To reach a broader public, Mindset Health developed a public service announcement (PSA) that was not language based. This was to allow for the message to be heard in areas of high noise levels as taxi ranks as well as to remove language barriers in a multilingual country. A PSA concerned with PMTCT was developed and evaluated via focus groups in high density urban and rural areas, with general practitioners and near clinics. The PSA was designed to test various PSA methodologies as well as to target various stereotypes within South Africa. The same message was created using live actors and also paper puppets.

Lessons learned: The focus groups elicited high levels of perceptions of the message that are useful for general PSA construction as well as the challenges associated with addressing stereotypes of HIV/AIDS in a developing context. Live actors were preferred over puppets, as “puppets don’t get HIV”, with key findings on music style, action sequences and methods of conveying action having implications for PSA creation. The PMTCT content was well received and the role of men and support to women was key, although a variety of myths and stereotypes emerged along both gender and racial lines.

Next steps: The implications for PSA methodology are discussed to contribute towards message development in multilingual settings. The next step is to create further messages based on the outcomes of the research in order to meet the unique conditions of these environments.

MPOE0588
Factors associated with risk perception among adolescents living in Soweto, South Africa: a HIV prone area
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Background: Youth in South Africa and Sub-Saharan Africa are vulnerable to HIV infection because they are the ones who are most affected. The 2008 South African Household Survey reports a reduction in infections among the 15-19 year olds, the trajectory of the epidemic may be influenced by adolescents. This study examined behavioral and psychosocial predictors of risk perception.

Methods: This study was based on a larger adolescent survey conducted in the last quarter of 2008 among 16-18 year olds living in Soweto, an urban setting in Johannesburg, South Africa. A cross-sectional study design was adopted and the questionnaires were interviewer administered. Consent was sought for all participants.

Results: There was considerable consensus that both HIV infections and condom use are on the rise among the interviewed adolescents. Among boys aged 16-18 years, 17% (n=86) reported using drugs to get high, 13% (n=267) were sexually active and 37% (n=169) had multiple partners. The Cronbach Alpha was 0.64. Good predictors in the univariate analysis were males, substance use (alcohol, tobacco and drugs), peer pressure, current number of sexual partners and anxiety. In the multivariate analysis, age (OR:2.8 CI:1.8-4.3), use of drugs (OR:2.6 CI:1.4-4.6) and multiple partners (OR:1.9 CI:1.2-3.0) were good predictors of high risk perception.

Conclusions: This study suggests that HIV prevention messages targeting adolescents should be tailored by gender and should address risk related to substance use and multiple sexual partners. The next steps include replication of the study and creating a scale to measure risk perception.

MPOE0589
Impact of branding HIV-related services in local language and socio-cultural context: an analysis from Kerala, India
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Issues: HIV programmes across the globe invests substantially in generating awareness on prevention and availability of services. In India, some of these important services include:

• Integrated Counseling and Testing Centres (ICTC)
• Targeted Interventions (TI), specific prevention programme among HRGs,
• Drop in Centres for PLHIV
• Community Care Centres (CCC)
• STI Clinics, and
• ART Centres

Kerala is a country with 35 States and Union Territories. Languages differ in almost all the States. Generally, English names of the service centres are used. This present study from understanding the basic purpose for which the service stood for. In many cases it is even difficult for them to pronounce the names of such centres. This scenario adversely affected the efforts taken.

Description: The study looks into the impact of branding HIV services in local languages according to the socio-cultural milieu. Kerala State AIDS Control Society (KSACS) undertook this branding exercise for the year 2000.

Lessons learned: The study shows increase in service uptake after the branding exercise. Data analysis revealed 526% increase in voluntary testing , and a 374% increase in PPTCT services during the initial six months of the post branding period (October 2007 to April 2007) when compared to the pre-branding period (April 2005 to October 2005).

Next steps: HIV programmes should consider linguistic and cultural barriers while trying to promote services. This should not be limited just to IEC materials like brochures and leaflets. Hence, national programmes need to brand the service centres in local language and in a culturally acceptable way. Different logos, colour schemes, and typography for different services can be given, which will increase visibility, and even address the illiterate people. It is also seen that such brand names will easily fit into the local communication interventions like folk programmes, songs, dances, puppet shows, dramas etc.

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MPOE0590
Current perceptions of current HIV prevalence and multiple partner sex in Uganda
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Background: HIV prevalence decline in Uganda seemed to end in the mid-2000s. A national sero-behavioral survey in 2005 showed prevalence to be 6.4%, higher than previously estimated. Other data also suggested a change. Uganda is a country of 35 States and Union Territories. Languages differ in almost all the States. Generally, English names of the service centres are used.

Methods: We conducted four focus groups in two peri-urban neighbourhoods of Kampala and two focus groups in a rural area, among males and females ages 30-40. HIV prevalence peaks in these age groups, and they are also old enough to remember HIV prevalence 20 years ago, when Uganda successfully responded to AIDS. Transcripts of discussions were analyzed using MAXQDA, a qualitative data analysis program.

Results: Respondents believed that HIV infections are on the rise, that extra-marital sex occurs more frequently than in the past, and that men and women are less afraid of getting AIDS today compared with 20 years ago. The major AIDS prevention messages remembered and discussed today are about testing and condom use, whereas testing was considered unreliable because other data also suggested a change. Uganda is a country of 35 States and Union Territories. Languages differ in almost all the States. Generally, English names of the service centres are used.

Conclusions: There was a considerable consensus that both HIV infections and multiple and concurrent partnerships are on the rise. These findings are consistent with recent behavioral data. There is less fear of becoming HIV infected, in part because HIV is no longer regarded as a fatal disease. The possible disinhibitory impact of ARV availability and how to counter this should be studied more carefully.

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MOPE0591
Youth centred approach in tackling love, sexuality and HIV using the Join In Circuit (JIC)

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Issues: Given that the rate of new HIV infections is highest amongst youth (15-24 years) there is a need to target youth with age appropriate and effective information on HIV and HIV prevention and care services. JIC captures interest and provides crucial basic life skills. Culturally young people seldom discuss matters of sexuality with parents, and given break down of traditional social structures due to population mobility, young people are particularly vulnerable. JIC targets youth and advocates for behaviour change in an interactive manner. Central to JIC is the approach that love, sexuality are pleasurable events in a young persons’ life which need support.

Description: JIC is a learning tool that uses seven stations led by trained facilitators to stimulate group discussion on issues of HIV and AIDS and reproductive health. JIC runs are conducted at a public place. The Stations (i) HIV Transmission (ii) Contraception (iii) Condom use (iv) Sexually Transmitted Infections (v) Body Language (vi) Positive Living (vii) Love and Sexuality. Its three central messages are: inform, protect and show solidarity with others. JIC discussions are guided by tools; stand alone boards, pictures, wheel of fortune game, and a puzzle.

Lessons learned: JIC is a useful informative and interactive tool. It builds youth confidence and self awareness. Youths facilitators have transformed from being volunteers to pursuing professional careers in social development. Facilitators tend to seek more information on HIV, AIDS. Age mixing amongst participants hinders frank discussions. As a result of JIC, there was notable increase in health seeking behaviour at the local health facilities. JIC runs are convenient being community based and have low cost.

Next steps: To encourage documenting youth experiences and behavioral patterns with local health care providers to measure long term impact using existing surveillance indicators.

MOPE0592
Disclosing to children their HIV status-experiences of using the talkback book for disclosure with caregivers in Soweto

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Background: The objective of the pilot study was to establish the role of the talkback book: Safe disclosure to children with HIV and AIDS as a support group tool to enhance safe disclosure strategies.

Disclosure of HIV status to the infected child involves talking about a highly stigmatised, potentially life threatening illness and most caregivers are highly concerned about causing distress for their child (Lesch, Swartz, Kagee, Moodies and Kafarai et al., 2007, Wiener, Mellins, Marhika & Battles, 2007). Further, due to the reality that paediatric HIV infections may occur as a result of prenatal transmission of the virus (UNAIDS, 2006), there may be an added element of guilt or self-stigma which may prevent especially a mother to disclose to her child.

Methods: Disclosure to a child is a process requiring preparation and support for both the caregiver and the child. The pilot study therefore took the form of a closed support group comprising of eight sessions, facilitated by a trained counsellor and supported by a facilitator to provide language interpretation. Participants were caregivers of children living with HIV who were not ready for disclosing the HIV status (children) to their child. The pilot took place in two different sites. The facilitator used the Talkback Book for children as a tool to guide the session.

Results: The pilot of the Talkback Book revealed a decrease in reported anxiety levels and discomfort associated with talking about HIV. Further, all caregivers reported having more frequent and open discussions with their children about reasons for taking medication, the main reason being of course their HIV-positive status.

Conclusions: The pilot groups indicated that the book can be used successfully to encourage disclosure of HIV status to children.

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MOPE0593
Looking beyond the ‘STI/HIV factor’ in female sex workers: lessons learnt from a study in South India

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Issues: Absolute narrow focus of health-care programmes on STI & HIV prevention related to female sex workers, has tuned on health system & beneficiaries to look only at their sexual health, thus causing them not to look at their own health in a holistic way or even ignore their health.

Description: Female sexworkers in reproductive age-group were interviewed in Tamil Nadu. The study was conducted using reproductive health practices and health behavior. During menstruation, majority of women used cotton-cloth as protection, changing the cloth twice-a-day. Around 1/4 washed the cotton cloth after change. Sexual intercourse with clients reported by most half of them. Douching during menstruation practiced by 55% while around 20% of the respondents & 3% didn’t use douching. Menstrual suppression practice was reported by 37%. Few used injectables while most used pills. The ‘Madam’ / Broker-incharge was prescribing to person on majority. Abortion was reported in 30% of the FSWs but untrained personnel involved in more than 45% did not receive antenatal care during pregnancy. Around 61% has experienced some reproductive morbidity, mainly a single sought health-care. Health-care was higher among single women, literates, among those who showed increased protection change during menstruation and those who practiced washing.

Lessons learned: Female sexworkers being covered by STI/HIV related services. Reproductive health and general health being ignored. Many issues related to hygienic-menstrual practices, access to safe abortion services and comprehensive care being overlooked. Prevention programmes do offer services with trained health care personnel, but focused only on Sexually Transmitted Infections (STI). This not only caused health-care personnel but also the FSWs to attend to related issues and not look at health in a holistic way. This further increased vulnerability of these women, subjecting them to more risks.

Next steps: Holistic health-care covering reproductive, antenatal care etc to be integrated into the existing preventive programmes.

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MOPE0594
The HardCell web site: how to engage hard to reach MSM around health promotion online

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Issue: MSM in the UK with many sexual partners and participating in esoteric sexual practices, such as fisting are a sizeable population but hard to engage around health promotion. They are at increased risk of HIV and other STIs such as hepatitis C and lymphogranuloma venereum.requested online information (67.8%). THT created a web site to meet these men's information needs around HIV, sexual health and drug use. Exploratory work with men identified their needs and shaped website content and presentation. As this sexual lifestyle is often stigmatised, men had strong views on how health promoters should engage with them. The site (www.hardcell.org.uk) has information and harm reduction content covering 18 esoteric sexual practices, 16 STIs, 13 recreational drugs; also sexual dysfunction (including sex addition) and HIV.

Lessons learned: Generating traffic to the site required advertising on specialist websites, links with specialist sites, ads in appropriate parts of the gay press, and promotional materials in venues and at events for this group. Analysis shows visitors come chiefly from the UK, but also other English speaking countries, and that fisting, water sports, barebacking, cocaine and poppers are the issues of most interest. With 73,782 visits since launch (May 2008-Feb 2010), 695,550 page views and 100 visits per day, the site is one of THT’s most visited sites for MSM. It is also acting as a resource for health promoters working with such men.

Next steps: High traffic shows health promoters can reach a marginal, potentially unresponsive population if sensitivity is shown to their needs and interests around HIV, health, drug use and sex. A culturally relevant information bank now exists to support future interventions. Involvement of commercial interests catering for this population is being sought to refresh the site and encourage new and repeat visits.

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MOPE0595
Life skills and HIV/AIDS prevention intervention to women self-help group members in Tamil Nadu, India

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Background: Since 2004, The Tamil Nadu State AIDS Control Society in collaboration with Tamilnadu Corporation for Women Development (TNCW) and Center for Disease Control(CDC) implementing an intervention program for women Sex Help Group(SHG) members to better understand gender, sexual health and vulnerability to HIV/AIDS. 185,000 SHG members in 14 districts covered under this program. This study assessed the Knowledge/ awareness about symptoms of STI in men and women, seeking behavior, knowledge, opinion and attitude on HIV/AIDS, Risk perception and condom negotiation.

Methods: Two districts have been selected to evaluate the training program which has 260,000 SHG members. Probability Proportionate to Size (PPS) method was adopted to sample 330 SHGs from each district. Of 265,000 SHG members, 2640 SHG members with the age group of 18-49 from 660 SHG were selected randomly for the study. A structured interview schedule has been administered for Baseline and Endline.

Results: 78% of the respondents were at 26-49 age categories; 87% were married; 48.6% were working as agricultural labour; and Mean income was 78% of the respondents were at 26-49 age categories; 87% were married; 48.6% were working as agricultural labour; and Mean income was 45.3%.

When compared the Baseline and End line results, the SHG women

- Awareness of more than two correct methods for prevention of HIV increased from 26.5% to 45.3%.
- Awareness on prevention of HIV increased from 26.5% to 45.3%.
- Awareness on availability of prevention services with trained health care personnel, but focused only on Sexually

Lessons learned: This prevention intervention program increased the awareness on STI/HIV to the grass root level female which will eventually transfer knowledge on STI and HIV/AIDS to the rural folks.

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MOP0596  How can we use the youth to educate parents about AIDS in traditional African societies: the case of Namibia and Malawi  
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Issues: In Namibia and Malawi, for example, youth are becoming increasingly informed about HIV due to their access to internet, mobile telephones and social networking clubs. Whilst the youth have access to diverse sources of information on sex and HIV and sometimes seek better health behaviours compared to their parents, they are not encouraged to share this information within households. It is vital to stimulate the strategies whereby the youth can share information on HIV with their households.  

Lessons learned: New strategies such as video (short/long), body mapping, unconfirmed in the community have encouraged dialogue within households on HIV. Girls have particularly used art in Namibia to stimulate discussions on HIV. There are youth-led theatre which combine music and drama to attract large crowds. Competition among parents to ensure that their adolescents are selected for some key roles in theatre and video shows has enhanced their participation in peer-family education.  

Background: HIV/STI affects young people in Namibia and Malawi to enable them to inform themselves and stimulate dialogue within their households on sexuality, gender and other forms of social rights. It will stimulate exchange of ideas and experiences among youth across the countries.  

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MOP0597  Coupon system, strategy to increasing coverage outreach and STI screening - behaviour change intervention program among MSM  
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Background: The coupon system is a system of recruitment of MSM to participate in HIV/STI screening and AIDS by using social networks (MSM) their have. This system also allows the participation of MSM in the education process because every MSM who had the task of distributing coupons to MSM to educate others MSM about HIV and AIDS and risk reduction is possible. With a very short program this strategy can be quite helpful in improving coverage and access to outreach services STI-related health and HIV (VCT).  

Methods: Coupon system is done by asking the MSM to be a recruiter (herein referred to as Seed). An MSM recruiters were given coupons to recruit 2 MSM others in their social network (hereafter referred to as wave). In this way, the program education about basic information on STIs and HIV and how to reduce the risk of transmission to the MSM which recruits. Also encourages MSM who have been recruited / trained to come to the office or DIT institutions to follow the strengthening further information, quizzes and surveys conduct interviews.  

Stage: Reception, Quiz, Behavior Survey Interview, Peer Education, Payments  

Results: Increasing outreach coverage and access to STI clinics as many as 300 MSM within 2 weeks. And indirectly also increased the involvement of MSM in HIV prevention programs (peer programs) by providing education of their social network.  

Conclusions:  
• Effective enough to raise-the coverage in the provision of STI and HIV information of gay and other MSM,  
• Improve access to coverage of STI and HIV services (VCT)  
• Increasing the involvement of the Gay and Other MSM in HIV prevention programs  
• Requires substantial costs, because for Gay and Other MSM involved should be given a cash reward.  

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MOP0598  Empowering the Ukrainian government to master the challenges to its leadership role in HIV prevention - lessons learned from Ukraine  
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Issues: Ukraine's HIV epidemic has been concentrated among most-at-risk populations (MARPs). Consequently, the Government and its partners focused on rapid scale-up of treatment and prevention among MARPs. Due to the significant increase in sexual transmissions and a trend towards a generalized epidemic in Ukraine, the need for expanding the prevention response to the general population has become evident. The Ukrainian Ministry of Health (MoH) has taken the leadership in mobilizing and coordinating all relevant stakeholders in developing, implementing and evaluating the first national HIV prevention campaign for the general population. However, ministerial capacities are limited in this area and intersectoral cooperation generally weak.  

Description: The Ukrainian MoH turned to the German MoH for support in building capacity, strengthening cooperation and finding ways of sustaining an expanded prevention response. For this purpose, the Ukrainian MoH initiated a multisectoral working group in cooperation with GTZ, developing a complex evidence-based concept and action plan for a HIV prevention campaign that started in 2009.  

Lessons learned: The establishment of the working group proved an important milestone in the empowerment of the Government to streamline and coordinate the prevention response, particularly in its leadership role of the national coordination mechanism for the campaign climate. The inclusion of all constituencies, including civil society and faith based organizations, has led to a broad-based consensus on the campaign approach. Despite the economic crisis, major Ukrainian companies committed themselves to the dissemination of campaign messages, demonstrating corporate social responsibility. The key challenge is to maintain momentum.  

Next steps: Prevention messages and materials have been developed and will be communicated and distributed nationwide. Major efforts are underway to sustain campaign implementation, monitoring and evaluation over upcoming years with the support of all partners, in order to achieve the long-term goal of changing behaviours and social norms among the general population.  

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MOP0599  Touching, treating and translating: experiencing behavioural change towards HIV risk reduction through community-in-one approach among male power loom workers in a high prevalence state of India  
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Background: A simple and community specific intervention has a greater potentiality to affect the behavioural pattern for HIV risk reduction. The present paper discusses the effect of a five year long Government sponsored program in changing the behaviour among a high risk population in Mumbai. It also critically discusses the operational and replication issues of the program.  

Method: The survey data of 1560 young male within the age group of 18 to 45 who participated in the pre programme study (March -July2001) and 897 in post programme study (Aug- December 2006) is used for analysis along with the data gathered from Focus Group Discussions and In-depth narrations.  

Result: The baseline survey reveals, average commercial sexual encounter is more than two per week per person. The condom use is low (21.3%) in sexual encounters. The prevalence of any symptomatic sexually transmitted infections (STI) is high (38%), with a high level of wrong management of STIs. The end line survey data reveals a significant increase of condom use (63.1%) within commercial sexual encounter, increase in correct management of STIs (14.3% v/s 49%) and a reduction of reporting STIs (7.1%). The indicators like alcohol consumption during commercial sexual encounter, recreation activities have also shown a significant change within the community. The Logistic regression model shows the effect of specific program components focusing on community responsibilities in changing the behaviour across the time period.  

Conclusion: The national HIV program for risk reduction among mobile community should look beyond the typical peer model approach and innovative community specific approaches for an easy to implement yet promising intervention model.  

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MOP0600  Training of teachers in counselling skills: a discussion and activity based intervention among primary and secondary school teachers in Swaziland  
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Issues: High numbers of orphaned and vulnerable children presenting at school with multiple issues related to HIV including bereavement, poverty, abuse, relationship issues, pregnancy and ill health. Teachers under increasing strain to provide psychosocial support for students affected by HIV/AIDS.  

Description: Moya Centre works with 11 High Schools and 3 Primary Schools in a holistic capacity. Head and deputy teachers expressed a concern for the increasing stresses the teachers were facing in dealing with the many problems the children bring with them to class as a result of the HIV crisis in the country. Moya centre trained 300 teachers to be lay counsellors in Swazi- 

als developed in South Africa. Guidance and Counselling officers from the Ministry of Education were trained and employed as facilitators. Attendance and initial feedback from teachers was excellent.  

Lessons learned: Teachers benefited from the opportunity to experience counselling themselves. The majority reported being more open minded after the course. Most said their approach to discipline had changed in that they would investigate the reasons for unacceptable behaviour or poor performance before making judgements. Many schools lack an appropriate space in which to conduct counselling sessions. There is negative stigma towards receiving counselling. Some teachers do not feel they have the knowledge and skills to counsel children who are HIV-positive. Issues of confidentiality deterred some children from accessing counselling.  

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**MOPE0601**

Factors influencing sexual behaviours among adolescents living with HIV and AIDS in Uganda

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Background: With increasing access to ART, the lives of adolescents living with HIV and AIDS (ALWHA) have improved significantly. This achievement notwithstanding, concern is rising in HIV programs on how to address issues of their sexuality. It is imperative, therefore, that their sexual behaviours and the factors that influence them are well understood. This survey aimed at generating information on the sexual behaviours of ALWHA to inform programs and policies.

Methods: We carried out a cross-sectional survey among adolescents living with HIV and AIDS accessing care in 8 public hospitals in Uganda. From September 2009-January 2010. Exit interviews were conducted, descriptive and X² results were obtained using SPSS.

Results: The survey covered 386 adolescents aged 13-19 years, majority were female 226 (58.5%), 258 (66.8%) orphaned and 221 (57.3%) catered for by relatives. Many 232 (61.1%) acquired HIV vertically, 304 (78.8%) were on antiretroviral therapy. A total of 154 (39.3%) had initiated sexual activities, 67 (17.6%) had ever suffered from an STI, 51 (13.2%) had ever been pregnant/impregnated someone. Only (43.7%) were using condoms consistently.

Conclusions: Sexual behaviours of adolescents living with HIV are influenced by gender, being in/out of school, not living with parents and age of current sexual partner. Service providers should tailor services and information to suit social demographic characteristic of ALWHA.

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**MOPE0602**

A model of evidence-based sustainable and scalable BCC strategies to address HIV prevention needs of out-of-school youth, Karnataka, India

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Issues: Worldwide 50% new HIV infections occur among the young aged 15-25 years, mainly through sexual transmission. In India, Government programs have been launched to address the vulnerability of adolescents. A few young people reporting decreasing age of sexual debut, however, implementation is weak. Furthermore, in Karnataka, where the prevalence of STIs among young people was very high, many Government youth programs were suspended due to public outrage against HIV education.

Description: In 2006, UNICEF partnered with CARDS (Citizens Alliance for Rural Development & Training Society) as the Lead NGO in Karnataka to provide technical and managerial support to a pilot of Young Peoples Initiative (YPI) programs implemented through local NGOs/CBO partners in 4 districts. The objectives included addressing the needs of out-of-school youth already at risk and vulnerable to HIV. It also facilitated mainstreaming and convergence efforts through stakeholder’s involvement and strengthened existing service delivery mechanisms through the Government health systems. The agents-of-change were a well-trained cadre of most-at-risk violence Peer Educators called Geleela/ Geelahi (male/female “true friends” in local language). They further categorised their peers into three categories namely Most-at-Risk-Adolescents (MARA), Especially-Vulnerable-Adolescents (EVA) and Adolescents-and-Youth-Not-Mostly-at-Risk (AYNAR). MARA is importing BCC on delaying sexual debut, safe sex practices, gender rights and related sexuality issues to them.

Lessons learned: Results showed that 90% of the Peer Educators availed of STD and HIV screening services and 100% reported consistent condom use. They reported high demand from their peers and were able to help the MAMA population to these services. Some of the service providers were also sensitised to the youth-friendly approach. Today these trained Peer Educators are a mobilised and motivated force which is continuing their mission.

Next steps: This successful YPI model is an effective, sustainable and scalable strategy to reach out-of-school MARA, EVA and AYNAR youth. It adheres to the Government agenda of convergence and increased health seeking behavior for youth and should be replicated all over India.

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**MOPE0603**

Testing the effectiveness of peer education curriculum in HIV prevention: a case study of 1 Choose Life-Africa (ICL) at Egerton University, Kenya

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Background: The substantial prevalence of HIV in Africa underscores the urgent need for effective HIV programs. This presentation reports the results of an effectiveness trial for the ICL’s HIV prevention program carried out among Kenyan University students.

Methods: Longitudinal data was analyzed from 182 student volunteers, randomized to an intervention or control group. The intervention group received training as HIV prevention peer educators with a 32 hour theoretically based curriculum. All students were given a pre-test survey assessing HIV related attributes, intentions, knowledge and behaviors and repeated 3 times over the next 6 months. Data was analyzed using Linear Mixed Models (LMM) or Generalized Linear Models (GLM) to compare the rate of change on 13 dependent variables that examined sexual risk behavior. Monitoring data on types of HIV prevention messages delivered by the peer educators was obtained.

Results: Based on multiple level models, the slope coefficients for 4 variables showed small but changeable differences in the increased messages from oral, vaginal, or anal sex in the last two months, condoms attitudes, HIV testing, and refusal skill. The intervention demonstrated evidence of non-zero slope coefficients in the direction on 12 of 13 dependent variables. Trained peer educators delivered HIV prevention messages in a one-to-one format, 1,862 times and reached 1,819 students through small group sessions. Messages were delivered at larger group thematic sessions that were attended by a maximum of 5,970 persons. Condom distribution projects resulted in 3,742 male and 796 female condoms being distributed, and 268 individuals were referred for HIV testing.

Conclusions: The ICL peer education training appears effective in reducing sexual risk behavior and training students to promote messages in resource limited settings.

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**MOPE0604**

Qualitative evaluation of a comprehensive strategy to improve adherence in Mexico

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Background: Directly administered antiretroviral therapy (DAART) programs to support HAART adherence remain largely unstudied, especially in lower-income contexts. This qualitative evaluation aimed to explore acceptability and key elements of perceived success of a modified-DAART strategy implemented among people living with HIV (PLWHIV) in Mexico.

Methods: PLWHIV with poor adherence to antiretroviral therapy were invited to participate in an intervention to improve adherence. The comprehensive care strategy involved a social worker visiting PLWHIV at home or work five times/week and then three times/week for six months. The purposive sample included PLWHIV with different characteristics that might influence acceptability. Twelve audio-taped in-depth interviews (45-60 minutes) were collected at baseline and 1 year follow-up from PLWHIV participating in the intervention. Four social workers from the program were interviewed, and qualitative analysis was done.

Results: PLWHIV with varied characteristics (gender, age, sexual identity, socioeconomic level, HIV+ status disclosure and level of social support) found most aspects of the intervention acceptable. Program elements that PLWHIV perceived as helpful with adherence included: acquiring knowledge about HIV treatment; support in creating a routine or system for remembering to take medicines; help navigating the healthcare system and communicating with healthcare personnel; resolving secondary effects of treatment, and the most important element was help dealing with social-support and emotional barriers to adherence. Some PLWHIV felt they needed a longer period of visits by the social worker.

Conclusions: PLWHIV satisfaction with a social support strategy that includes modified-DAART is high. Patients and social workers perceived the program as effective in improving adherence, especially the social support from social workers, who were able to support PLWHIV in creating their own solutions to their barriers to adherence. Quantitative methods should be used to evaluate intervention impact and cost-effectiveness. When scaling-up, the elements that make the intervention acceptable should be maintained.

**MOPE0605**

Post test clubs: addressing safe sexual pleasure, positive health and dignity among people living with HIV and AIDS (PLWH)

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Issue: HIV prevention has traditionally targeted unaffected high risk populations with less focus on preventing transmission and re-infection among PLWH. PLWH face burdens that HIV negative persons do not encounter, including stigma and discrimination, violation of sexual and reproductive rights and engaging in multiple concurrent partnerships, thus heightening the
risk of infection or re-infection. Innovative support provided by trained or lay counsellors after initial counselling and testing is crucial for PLWHA to live healthy, positive lives.

Description: AED Botswana’s unique post test club manual allows PLWHA to discuss their positive test results in anonymous relationships where they expect the potential for multiple concurrent partners. Ideas for safe sexual pleasure and communicating these ideas with one’s partner are not usually discussed in Botswana culture. One man stated he had “new ideas about sexually engaging with his steady partner and would not need the other partners.” Other tools addressing the rights of the PLWHA include disclosure coping with HIV-related stigma, family planning, postponing pregnancy and deciding to have children. After completing the twelve modules participants become community mobilizers.

Lessons learned: The majority of members in 19 post test clubs with a current membership of 519 (172 males and 347 females) and 164 members, reported that this kind of intervention provides them with supportive therapeutic counselling and motivation to live healthy lives and communicate openly about sex with their partners.

Next steps: Increasing membership in current post test clubs and expanding the number of Botswana’s post test club sites are priorities. Mobilizing more PLWHA to lead discussions on sexual rights and pleasure in their support groups will result in a decrease in high risk sexual behavior.

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MOPE0606
Long-term follow-up of a randomized controlled trial: HIV risk reduction strategies for young African American adolescents

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Background: Considerable evidence documents the high risk of STD, including HIV, among inner-city African American adolescents. However, important questions about the longevity of intervention effects and impact on disease outcomes have not been adequately addressed. Here we report a 40-month follow-up of a randomized controlled trial of theory-based, culturally appropri- ate, abstinence and safer sex interventions.

Methods: African American grade 6 and 7 students (mean age = 11.8 years) were randomized to one of three interventions: abstinence-based, safer-sex, or health promotion control. Follow-up was based on self-reported cognitive theory, the theory of planned behavior, and qualitative research with the population. We provided baseline data at three settings: clinic collected baseline, post 3, and 12 months post-intervention. The original participants provided new parent or guardian informed consent to participate in the 40-month follow-up.

They completed self-report and self-report behavioral questionnaires and provided urine specimens that were tested for chlamydia and gonorrhea. All cases were treated according to CDC guidelines.

Results: We retained 501 or 76.0% of the 659 African American adoles- cents who had participated in the original trial. Retention did not differ by intervention condition. In the abstinence intervention compared with health promotion, percentage reporting sexual intercourse (P = 0.05) and mean fre- quency of unprotected sexual intercourse were smaller (P < 0.0001). Safer sex intervention participants compared with health controls reported fewer sexual partners. Positive STD results were obtained for 38 or 7.2% of the 496 adolescents with valid results, with higher STD prevalence in girls that boys (P < 0.01). STD prevalence did not differ between abstinence or safer-sex intervention and health-promotion control.

Conclusions: These findings from a randomized controlled trial are provoca- tive, given that theory-based, culturally appropriate abstinence interven- tions may be one efficacious strategy to reduce sexual risk behavior during a high-risk follow-up period among inner-city African American adolescents.

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MOPE0607
Role of workplace programmes in fighting HIV/AIDS in Kenya ports authority

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Issues: Absence due to AIDS related illness, loss of experience per- sonnel, replacement and training costs, reduced productivity and increased medical expenditure threaten the viability of the transport sector (Kenya Ports authority). Work place programmes in KPA started in 1996, at the time when the Authority was losing 12 employees and dependants weekly. With a work force of 7000, male dominated, HIV prevalence was at 27% and none on ARV’s or referrals. With FHI a project was sponsored to implement comprehensive HIV/AIDS workplace initiative - KPA CARE. The programme included behaviour change communication with peer education components, referrals for testing and treatment of STIs and VCT, education and care in support KPA.

Description: Several methodologies were used by the Peer educators to help the employees and dependants, confront the issue of sexual behaviour, reflect on or seriously think about sexual behaviour in relation to HIV/AIDS, develop the appropriate response to sexual behaviour and to agree on the best approaches to control sexual behaviour. These methods are, one minute role plays, skits, drama and storytelling. The topics covered in KPA CARE were sexual and hormonal contraception, safe abortion techniques, HIV risk prevention, safer sex and communication, etc.

Lessons learned: Presently with 826 employees on ARV’s and a declined level of retention of the communication messages.

Results: The base-line study was conducted in 2007 and the project evaluation study took place in 2009. Two-level random sampling was used in educational establishments in the main towns of Benin. Data was collected using a structured questionnaire and exposure was measured based on the level of retention of the communication messages.

Conclusions: The qualitative evaluative review suggested that the model used for Zimbabwe’s National BC Strategy is effective, while some adjust- ments on implementation modalities were suggested. Further quantitative and qualitative evidence should be collected.

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MOPE0608
Study on effectiveness of the behaviour change community approach - the case of the Zimbabwe HIV prevention strategy

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Background: A large-scale HIV prevention behavior change programme is currently being implemented in 26 districts of Zimbabwe through 8 NGOs. To increase capacity of the community to address HIV risks and underlying vulnerability factors, traditional, political and religious leaders receive training as role models and advocates while community members 15-49 age group attend community workshops. One behaviour change facilitator (BCF) was assigned to 500 participants over three years. To determine the effects of this qualitative evaluative review of this large-scale programme was conducted to determine its effectiveness.

Methods: Three independent consultants including an external team leader recruited through the UNAIDS Regional Technical Support facility conducted key informant interviews, focus group discussions, and qualitative exploratory reviews. Local leaders, community facilitators (BCFs), participants and non-participants of community sessions as well as participant community sessions.

Results: The review concluded that the approach was theoretically sound, culturally appropriate for theZimbabwean context and impactful. It docu- mented concrete effects through individual stories of behaviour change and community level normative changes including reported improvements in com- munication in marriage, partner retention, and openness about HIV status, increased VCT uptake and increased condom use. Legitimation of the pro- gramme by local leadership promoted community buy-in while local NGOs supported the evidence for behavioural change. Monitoring and support visits to BCFs and implementing partners ensured a standardized package. Challenges observed included less frequent support in remote areas, difficulties in reaching participants in areas of popu- lation density and BCF attrition.

Conclusions: This qualitative evaluative review suggested that the model used for Zimbabwe’s National BC Strategy is effective, while some adjust- ments on implementation modalities were suggested. Further quantitative and qualitative evidence should be collected.

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MOPE0609
Successful condom promotion, targeting young adults in the Nacara-Donga region of Benin (2007-2009)

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Background: In Benin the HIV epidemic has become generalized, with an HIV prevalence of 1.2% in the general population (Benin DHS III, 2006). Among young aged 15 to 24 years, the prevalence is 0.7%, while 38% of the sexually active young adults reported having used a condom in the last twelve months. Aiming to increase condom use among youth, PSI-Benin’s KWF-fr- manced project conducted communication campaigns from 2007 to 2009. This analysis aims to highlight the behavioral impact of these activities.

Methodology: The baseline study was conducted in 2007 and the project evaluation study took place in 2009. Two-level random sampling was used in educational establishments in the main towns of Benin. Data was collected using a structured questionnaire and exposure was measured based on the level of retention of the communication messages.

Results: A representative sample of 1120 students was recruited for the base-line study and 2103 students for the project evaluation. Consistent condom use with casual sexual partner increased from 49.3% at reference in 2007 to 61.6% (p< 0.05) in 2009. This increase was correlated with ex- posure to campaign’s activities. Among men and women with low campaign exposure, consistent condom use was 52.9%, while among those with middle exposure, it was 65.5% (p< 0.001). Consistent condom use among high ex- posure was 66.4%.

Conclusion: By the end of this project, young men and women reported increased condom use and the increase was statistically correlated with a 1.9 level of exposure to PSI-Beniin’s activities. This result was achieved through messages focusing on HIV transmission and prevention knowledge and the self efficacy regarding consistent condom use with casual sexual partner. While the results are encouraging, there is a clear need to continue the campaign, whether financed by the community, by the public sector or external sources.

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Communication for behavioural and social change, or social change communication to affect group or societal outcomes (e.g. to change social norms, community stigma reduction, policy change) MOPE0611-MOPE0674

MOPE0610
“We stop AIDS” prevention education curriculum brings behavior change in East Africa

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Issues: Community silence around HIV and AIDS continues to be a challenge in East Africa. People need to talk openly about HIV in order to make personal behavior change and group action plans to help stop the spread of the disease.

Description: We Stop AIDS - Participatory AIDS Prevention and Support (PAPAS) is a prevention education curriculum developed by Catholic Relief Services in East Africa in 2005 to break the silence around HIV. Literacy is not required. Drama, role plays and drawings are used to stimulate discussions. Group size is normally 24 and it takes nine hours to complete. Implemented through 15 partner organizations, it has reached 15,000 in Ethiopia and 4000 in Uganda. The end goal is group and individual action plans to help stop the spread of HIV in one’s community, to protect oneself and to reach out to others with messages and support. Three independent evaluations, involving 521 respondents, were carried out to determine impact.

Lessons learned: We Stop AIDS brings about large changes in knowledge, attitudes and behaviors. Diverse people of all ages, different backgrounds and different countries and cultures made a wide variety of changes according to their own needs and circumstances.

• The methodology broke the silence around HIV and AIDS. At least half had spoken to others or in public.
• They made at least one change to reduce risk or to help others infected or affected by HIV.
• 95% of groups made action plans and carried them out.
• Greatest impact was on youth who engage in risky behaviors.

Next steps: We Stop AIDS is a successful participatory learning and empowerment tool. It should be prioritized for use among groups most vulnerable to infection.

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MOPE0612
The Latin American Media AIDS Initiative (IMLAS, for its acronym in Spanish), an unprecedented collaboration by leading broadcasters in the response to HIV/AIDS

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Issues: Although it is the third most HIV/AIDS affected region, stigma, discrimination and misinformation persist across Latin America. With communication infrastructure and ability to influence behavior, media represent a formidable force to fight HIV. However, media has long been an underutilized resource.

Description: The Global Media AIDS Initiative was launched in 2004 to leverage the power of media against HIV/AIDS. As part of it and in response to the overlooked but growing pandemic in the region, the Latin American Media AIDS Initiative represents an unprecedented collaboration by leading broadcasters. It goes beyond a traditional PSA campaign by emphasizing the integration of HIV/AIDS messages across programming platforms and by pledging start time, creative expertise and time.

As opinion leaders, the media’s engagement also sends a powerful signal to policymakers and other stakeholders. The success of the model is reinforced by evidence that media companies can strengthen brands and benefit financially from their efforts to fight HIV/AIDS.

From its first year of operations, IMLAS results include: 33 broadcasters in 13 countries engaged in the partnership - 25 aired the campaign and 6 fictional HIV-related plots; 10 participated in journalism and 4 in scriptwriter trainings. More than 45,000 seconds of airtime were donated, the campaign website was visited by 4000 unique visitors in two month and the Facebook site gathers almost 8.000 fans. Finally, 68 media professionals were sensitized.

Lessons Learned: This Latin American collaborative relationship among broadcasters, civil society institutions, and public health experts creates a powerful alignment of interests and experience that will build local capacity and strengthen social infrastructures.

Next Steps: The second year of operations of the IMLAS will deepen the work done at the start up, focusing on a second campaign and on the work with scriptwriters to include HIV/AIDS related contents in fictional plots.

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MOPE0613
Collaboration in rural Hudson Valley: intervention with LGBT youth

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Issues: Vulnerable rural LGBT youth have little opportunity to socialize in safe spaces, causing them to hide their sexual orientation, distorting their developmental process, creating isolation, stresses, unsafe sexual behaviors, and drug use, putting them at risk for severe health issues. Young gay men ages 13-24 in the Mid-Hudson region of New York State report 31% of new HIV infections.

Description: The Working It Out Project (WIO), a video-based manualized intervention, helps LGBT adolescents cope with stressful life events and stigma, develop healthy social skills and sexual roles, and prevent HIV/STIs, particularly while “coming out.” Through weekly sessions (video vignettes, facilitator-led exercises, group discussion), WIO enables teens to better cope with their sexuality and gender identification. Our successful urban intervention was adapted for rural youth in collaboration with the Hudson Valley LGBT Center, local NGOs and schools. Initially, 24 rural and town youth (ages 14-18; 46% African-American; 46% Caucasian; 8% Hispanic; 76% female (including 1 MTF); 24% M) were recruited.

Lessons learned: After extensive outreach to social service and school professionals in a 30-mile radius, we conducted a two-day facilitator training and piloted WIO at Kingston High School. These activities raised awareness of the needs of LGBT youth and led to change in agencies’ attitudes, values, and policy. Top issues youth identified were lack of community awareness, community hostility, heightened stigma, physical isolation, and related transportation limitations. School policies were instituted for proactive reporting of verbal harassment in classrooms, and youth reported improved school climate, “making the school less homophobic,” and establishing their rights to school clubs and activities.

Next steps: The program is now approved for the entire district and development of linkages to additional areas within the mid-Hudson region and in other rural northern counties of New York State is ongoing. The program is cost-effective and timely, as more youth are coming out at earlier ages.

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**MOPE0614**

"Choosing happiness": a community-based mobilisation of HIV-positive African women living in Normandy, France - how a photo novel was used to fight against the discrimination these women experience inside their own communities

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**Issues:** All the women from sub-Saharan Africa catered for at AIDES, the largest HIV community-based organisation in France, have been discriminated against by members of their own community. In these communities, AIDS is seen as a taboo disease, surrounded by false beliefs and causing infected people to be rejected. Because of this discrimination, they keep their status a secret, which in turn prevents them from receiving good care and treatment.

**Description:** Eight women from AIDES, joined together to design a tool to fight against the discrimination they experience in their daily lives. They wrote a scenario based on their experiences and after consulting with their relatives and friends, they decided that a photo novel would be an attractive and punchy option. AIDES activists coordinated the work and created the photo novel: the story, story-board, shoots lay-out etc. It was published on the first of December 2008. 30,000 copies were distributed throughout France, in shops and social venues which Afro-Caribbean people frequent. An assessment of the usefulness of this photo novel was carried out among shopkeepers and clients and members of AIDES.

**Lessons learned:** The scope given to these women in carrying out the project gave them a sense of worth and increased their commitment on all levels. Their project revealed that the photo novel is relevant and well adapted to the Afro-Caribbean population. It reflects the real life stories of HIV-positive people in their communities and helps people realise the dramatic consequences rejection can have. In addition, it is a beautiful and practical option.

**Next steps:** Support women in their new projects, particularly on the issue of HIV/HC co-infection. Republish the photo novel which is out of print.

**MOPE0615**

Tackling stigma and discrimination at the workplace and promoting self-disclosure of HIV-positive status

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**Issues:** Over a decade of HIV/AIDS workplace programmes, stigma and discrimination persist and pose a major challenge despite varied interventions undertaken. Governmental legislations and workplace policies on HIV/AIDS have invariably formulated HIV/AIDS policies to direct programme implementation in addressing stigma and discrimination. Self-disclosure, an indicator of success in reduced stigma, is still a rare occurrence while VCT uptake remains low at workplace and National level largely due to persisting stigma and discrimination.

**Description:** Swedish workplace HIV/AIDS programme (SWAP) refined a model of programme implementation in Kenya that has systematically addressed stigma and discrimination. This entails formation of representative HIV/AIDS committees, formulation of HIV/AIDS policies, capacity building for the committees and peer educators, awareness sessions linked with VCT and access to treatment care and support. Engagement of these committees has had astounding achievement in reduction of stigma and discrimination at the workplace. Workers have opened up and disclosed about their HIV status to fellow workers and become champions of stigma and discrimination at the workplace. The champions will be used to mentor other workplaces that are grappling with fear of stigma and disclosure. SWAP has also replicated the model in other countries where new programmes are being established while grappling with fear of stigma and disclosure. SWAP will also replicate the model to multiple sites will provide the experience needed to inform a robust and robust monitoring system to track progress. Applying the model to multiple sites will provide the experience needed to inform a robust monitoring system to track progress.

**Next steps:** To scale up to multiple sites and generate lessons that can be used to inform programs in other countries, additional work is needed. Detailed documentation of the process, participants, challenges and successes is needed, which can then be used to inform the strategies for other PSI sites. To develop a robust monitoring system, the lessons learned from the model to multiple sites will provide the experience needed to inform a robust strategy in Madagascar that may be replicated elsewhere.

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**MOPE0616**

Leaders of female sex workers and PSI-Madagascar join forces to promote female condoms in Madagascar

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**Issues:** With a 0.13% prevalence rate, Madagascar has a concentrated HIV/AIDS epidemic. Prevention efforts focus on vulnerable populations such as Female Sex Workers (FSWs), who constitute a key group susceptible to being infected with HIV/AIDS. As part of its prevention strategies, organizing male condoms since 1999, and it recently introduced the female condom targeted to FSWs.

**Description:** FSW peer educators assist in demand creation for female condoms and make it available to their peers. However, due to the limited number of peer educators, female condom availability is an issue in some hot zones. To keep up with female condom demand and to ensure program sustainability, peer educators started to network with FSW Leaders (FSWL) - who are opinion leaders among FSW - in its interpersonal communications. They were trained in condom sales, promotion and negotiation skills.

**Lessons learned:** Female condom sales rose from 84% to 100% of PSI’s monthly objective within the second month in the pilot zone. FSWLs took ownership of the program and serve as a liaison between PSI and FSWs. In addition, FSWLs serve as a sales point for female condoms at the community level and also make a profit. Healthcare professionals promoting female condom use among FSW should work with FSWL to ensure continuous availability of condoms in sex work establishments.

**Next steps:** To scale up to multiple sites and generate lessons that can be used to inform programs in other countries, additional work is needed. Detailed documentation of the process, participants, challenges and successes is needed, which can then be used to inform the strategies for other PSI sites. To develop a robust monitoring system, the lessons learned from the model to multiple sites will provide the experience needed to inform a robust strategy in Madagascar that may be replicated elsewhere.

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**MOPE0617**

TEA intervention for families affected by HIV in China

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**Issues:** The family forms the primary safety net for supporting people living with HIV/AIDS (PLHWA) in China. The quality of life for PLHWA and family members depend on how the family deals with stress, financial difficulties, health seeking, treatment management, and stigma and discrimination.

**Description:** An innovative intervention, TEA (Together for Empowerment Activities) for HIV-affected families, has been developed and implemented in Anhui province, China. The TEA intervention has 6 sessions (plus a preparation session) delivered at three levels simultaneously: 1) TEA Gathering (small group for PLHWA and their family members), 2) TEA Time (home-based family activities), and 3) TEA Space (community events) that build social integration for families living with HIV. The feasibility, acceptability, and accessibility of the intervention have been evaluated and the impact of the intervention will be assessed by comparing outcomes baseline and 3-month follow-up.

**Lessons learned:** The process of TEA intervention development involves three steps: 1) reexamine the original design based on feedback from two focus groups (PLHWA and family members), 2) TEA Time (home-based family activities), and 3) TEA Space (community events) that build social integration for families living with HIV). The feasibility, acceptability, and accessibility of the intervention have been evaluated and the impact of the intervention will be assessed by comparing outcomes baseline and 3-month follow-up.

**Next steps:** Data collected from the 3-month follow-up assessments will be used to explore outcome measures of children, PLHWA and family members in the TEA intervention group, compared to those in the control group. The next phase of intervention trial is under the development.

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**MOPE0618**

Lessons learnt from provision of quality voluntary counselling and testing services with same day results in the resource poor setting of rural Zambia in Lundazi district: impact of VCT intervention on prevention, stigma and discrimination in the communities

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**Issues:** Thandizani community based HIV/AIDS prevention and care started in September1999 to respond to death rates of 43% in the district attributed to HIV/AIDS. Less than 35% of people (350,000 district population) do not access VCT services in rural settings. Because VCT was not well conducted, stigma & discrimination was high for people with signs of HIV/AIDS.

**Description:** From 2003 to December 2006, Thandizani had no laboratory...
Gay men’s sexual health promotion in mainstream media: a Downunder perspective

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Issues: Rates of STIs have been increasing in gay men and other men who have sex with men (MSM) in Australia since the mid-1990s, with more rapid increases seen since 2002.

Description: To respond to this, the Australian Federation of AIDS Organisations (AFAO) developed ‘The Drama Downunder’, a widespread national community based campaign to promote regular and comprehensive sexual health checks for these men. This campaign was implemented nationally from 2006 to 2008. The campaign differed from most other community based campaigns in that it employed the tools of mainstream outdoor advertising as a key engagement component.

Lessons learned: The external evaluation of the campaign found very high levels of campaign recognition of up to 84%, and comprehension of 88%.

This high level of recognition was aided by engaging creative and a broad media mix and using different kinds of mainstream advertising channels including outdoor media. The evaluation demonstrates that the approach of adopting a more comprehensive media strategy was effective at increasing the reach of the campaign and suggested some evidence of behaviour change.

Next steps: These results support the value of using mainstream advertising strategies for targeting gay men and other MSM in future campaigns.

MOPE0620

Engaging the media in HIV and TB response in Zimbabwe

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Issues: From time immemorial, the media has had the important roles of educating, informing and entertaining. In light of the HIV epidemic and the linkages between HIV and TB, accurate print and broadcast campaigns have a responsibility to shape public attitudes, reduce stigma and discrimination, and contribute to behaviour change through information dissemination.

A Panos study that was conducted in 12 developing countries between 2005 and 2006, however reflected “minimal or non-existent” coverage of HIV and TB in the media. In Zimbabwe, just one article was found during the study period.

In light of this gap in reporting, SAFADS held two-day training workshops and weekly media briefings for two years to sensitise the media on the need to link HIV and TB in reporting and underpin it as their social responsibility, as well as to support media workers to become more informed about HIV and TB, and to develop targeted messages to reach their audiences.

Description: Following the training, media campaigns were developed with partner like VSO for a medical laboratory personnel took place, set up a laboratory and client tracking systems developed.

Lessons learned: The training led to increased awareness of HIV and TB, improved media reporting on HIV and TB, increased interest in working with HIV and TB and more positive attitudes and knowledge of HIV and TB.

Next steps: Our organisations need to duplicate method. There needs to be greater collaboration between TB and AIDS service organisations in media trainings.

MOPE0621

Novel anti-stigma pilot campaign targeting college students

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Issues: There are many fears and states involved in perpetuating the Life Cycle of HIV Stigma© including: fear of association, reality, consequences, and confirms development of stigma, denial, ignorance, and shame. Other non-fear based factors also sustain HIV Stigma, including potential complicity associated with the perceptions that one pill a day treatment is an easy remedy, researchers will find a cure or vaccine in the near future, and the stigma associated with homosexuality.

Description: A pilot program targeting college students at the University of Houston performed March 2009 included: (1) three front page stories and advertisements on HIV and Stigma (ads to be shown in full poster size); (2) meetings held with each of the university sororities and fraternities; (3) 124 students attended an HIV Stigma Symposium (Stigma Life Cycle will be provided in full poster size) (Symposium panel discussions by HIV+ and HIV affected individuals: each a face of the effects of stigma); (4) 64 students, who had not previously considered HIV testing, were tested; (5) a consortium of 12 partnering CBOs provided HIV information to students about their services; and (6) over 1,000 people have been reached via lectures and social media to educate them about the impact of HIV stigma on HIV+ people.

Lessons learned: By creating a peer-based safe environment supported by several CBOs, anti-stigma messages can effectively reach young people in a meaningful way.

Next steps: This pilot will be expanded to two colleges a year around the United States.

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Perceived condom efficacy: the case for maintenance messaging in HIV prevention campaigns

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Issues: In 2000, HIV/AIDS was declared a national disaster by the Government of Kenya, with prevalence among 15-24 year-olds estimated at 4%. In 2001, national survey data showed that perceived condom efficacy was among 15-24 year-old males at 48.2%.

Description: From 2001 to 2005, PSI-Kenya implemented national mass media communications including television and radio spots, interactive radio shows, and outdoor media via billboards and wall branding, to increase correct knowledge around condom efficacy among 15-24 year old males. Additional communications activities included brand building promotional activities (special events targeted at college students), market promotions and exhibitions, advocacy via celebrity outreach, and interpersonal communications (IPC) including school programs and community drama. 2005 survey data showed that positive beliefs of condom efficacy increased from 48.2% in 2001 to 86.4% (p< .001) among 15-24 year-old males. Based upon these results, the decision was made to suspend condom efficacy information, education, and communications (IEC) and focus resources on other prevention behavior change communications. Subsequent measurements among the target population showed positive beliefs of condom efficacy drop from 86.4% in 2005 to
MOPE0623

The recipe for success: strategies to increase male participation in PMTCT programs in rural Zimbabwe
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Issues: Involving male partners in PMTCT services has been a global challenge. In Zimbabwe, this has resulted in women not disclosing their HIV test results to their male partners. As such, male partners are at risk of acquiring HIV infection. The Organisation for Public Health Interventions and Development supports the implementation of PMTCT programs in Zimbabwe.

Next steps: Perceived condom efficacy is a fundamental determinant to condom use among 15-24 year-olds of age. PSI-Zimbabwe will introduce a male condom knowledge messaging into future programming. Additionally, PSI-Zimbabwe will continue to collect data to monitor important behavioral determinant data, including perceived condom efficacy.

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MOPE0624

Vulnerability of young people with disabilities to sexually transmitted infections (STIs) due to inadequate sexuality education in Osun State, Nigeria
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Background: The purpose is to investigate the impact of Sexuality Education on the vulnerability of young people with disabilities to STIs. Specifically, we examined the extent of Sexuality Education among young people with disabilities and impact of accessibility to Sexuality Education on the vulnerability to STIs. The hypothesis tested is that there is no significant relationship between adequate knowledge and vulnerability to STIs.

Methods: A cross-sectional research design and descriptive statistics, Chi-square and tabulation was used to analyze the data. The data was collected from 200 OSH schools representing the three senatorial districts in Osun State where lesions were reported from 2002 and 2007.

Results: The hypothesis was disproved @ 5% level of significance. 64.9% of the population no longer saw HIV as a death sentence. Whereas 40.8% of men who reported unprotected anal intercourse with casual partners (UAI-C) in the previous six months believed that HIV was a controllable disease, only 27.8% of men who reported never having engaged in UAI-C felt this way (p< 0.01). Also, while only 13.4% of men who always used condoms told us that there are some things they do now which they previously thought were too risky, this was true for 30.2% of men who reported record UAI-C (p = 0.001). Those decisions were made in part due to perceptions of relative risk: Whereas 59.9% of HIV-negative men said they might consider insertive UAI with someone who had told him he was also HIV-negative, only 43.6% would do so in the receptive position. If they did not know their partners’ HIV status then 30.6% would consider insertive UAI and 20.1% would consider receptive UAI. Very few men (1.5%) were willing to have sex with a partner they knew to be HIV-positive, even if they believed his viral load was undetectable, whether they were insertive (1.4%) or receptive (3.4%) partner.

Conclusions: In balancing risk and pleasure, many gay men more willing to take some degree of risk, but the perception of risk is no longer as severe as it once was. However, these considerations are not always rational: Some HIV-negative gay men will contemplate UAI with a partner even when they do not know his HIV status and will only decide otherwise if they are actually informed that he is HIV-positive.

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MOPE0625

HIV, stigma, social networks and wellbeing of older people in the era of ARV therapy in a community study in rural South West Uganda
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Background: This study examines social stigma, quality of life and mental health among older people by HIV and ARV therapy (ART) status and in a rural community in Uganda.

Methods: Participants were identified through MRC community cohort and clinic. Interview data were used to compute the WHO quality of life index (WHOQoL), prevalence of depression (using a standard algorithm), a social network index (SNI) (includes marital status, church-club memberships, closeness to friends and family), and perceived HIV stigma score (4 questions, 100% max. stigma).

Results: 250 people 50+ and over were interviewed, including 98 people living with HIV (49 on ART). The mean age was 62.5 years. 58% were women. In a multivariate analysis, the WHOQoL score did not differ significantly by HIV status, ART use, age, sex or income. Prevalence of depression was lower among HIV infected people than others (3.1% and 10.5%), but the difference was non significant when controlling for other variables. The SNI was lower for women (p< .001), older age (p<.001) and greater poverty (p<.003) but not by HIV status. Among people living with HIV, 89% revealed their status to the interviewer. The mean perceived stigma scores were 73% and 63% among those on ART and not on ART respectively. After controlling for age, sex, marital status and income, ART was associated with a higher stigma score (p<.043).

Conclusion: The majority of older people in this rural population did not perceive negative effects of their HIV status on the quality of life, mental health and social networks. Stigma (perceptions of HIV status) of people living with HIV may have been minimized because of the research special setting and the availability of ART. Perception of HIV status was higher among ART users who may be more exposed, indicating the importance of ongoing efforts to reduce stigma.

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MOPE0626

Reasoning risk-reduction
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Background: Perceptions of HIV risk have changed among gay men. We investigated current beliefs about risk and HIV among Australian gay men.

Methods: Pleasure and Sexual Health was an online survey of 2368 Australian gay men recruited during mid-2009

Results: The majority (54.9%) no longer saw HIV as a death sentence. Whereas 40.8% of men who reported unprotected anal intercourse with casual partners (UAI-C) in the previous six months believed that HIV was a controllable disease, only 27.8% of men who reported never having engaged in UAI-C felt this way (p< 0.001). Also, while only 13.4% of men who always used condoms told us that there are some things they do now which they previously thought were too risky, this was true for 30.2% of men who reported record UAI-C (p = 0.001). Those decisions were made in part due to perceptions of relative risk: Whereas 59.9% of HIV-negative men said they might consider insertive UAI with someone who had told him he was also HIV-negative, only 43.6% would do so in the receptive position. If they did not know their partners’ HIV status then 30.6% would consider insertive UAI and 20.1% would consider receptive UAI. Very few men (1.5%) were willing to have sex with a partner they knew to be HIV-positive, even if they believed his viral load was undetectable, whether they were insertive (1.4%) or receptive (3.4%) partner.

Conclusions: In balancing risk and pleasure, many gay men more willing to take some degree of risk, but the perception of risk is no longer as severe as it once was. However, these considerations are not always rational: Some HIV-negative gay men will contemplate UAI with a partner even when they do not know his HIV status and will only decide otherwise if they are actually informed that he is HIV-positive.

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MOPE0627

Let’s talk about HIV/AIDS in our community: participatory communication and community engagement for social change in conflict-affected settings
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All too often, HIV/AIDS communication messages are disseminated to recipients without real ownership of the messaging by community members themselves. Participatory communication activities can play a vital role in encouraging community dialogue about sensitive issues, taking into account the local setting, and promoting collective ownership of local social change processes. The Through Good Video Project, a community media initiative led by American Refugee Committee (ARC) and Communication for Change (CFC), aims to transform social norms, attitudes and behaviors around HIV/AIDS through participatory video activities. Teams of community peers are formed and trained to produce videos (dramas and documentaries) in local language...
MOPE0628

Community acceptance of male medical circumcision (MMC): a 2009 clustered cross-sectional pre- and post sensitization knowledge, attitudes, and beliefs (KAB) survey conducted in rural Uganda

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Background: The circumcision rate in Uganda (25%) remains one of the lowest in sub-Saharan Africa. The KAB instrument surveyed community acceptance of MMC as a HIV prevention tool before and after sensitization between February and July 2009.

Methods: Two cohorts of 315 male and female community members aged 11-25 years residing in two Kayunga, Uganda sub-counties participated. Sensitization activities included: meetings with religious-political-opinion leaders, twelve weeks of village-level drama presentations, a centrally placed billboard, two national radio talk/phone-in shows, market-place loud-speaker announcements, and a MMC program launch that received international attention in an excel spreadsheet,诊所, and results were compared using SAS®. Descriptive, chi-square and KAB weighted analyses were conducted.

Results: Median age in both surveys was comparable (30 vs. 28 years). There were no differences between gender, religion, or number of men circumcised between cohorts (X² = 0.20, p = 0.54, and p = 0.35 respectively). A large increase in knowledge that circumcision reduces the risk of HIV infection (p = 0.0004), and that more men wanting to be circumcised (p = 0.02), knowledge for the definition of male circumcision (NSS, 95.9% and 88.0%, respectively) and females who indicated that they would not want their husbands circumcised (NSS, 92.9% and 93.5%, respectively). No significant differences between the pre and post survey in the knowledge of the definition of male circumcision (NSS, 93.5% and 88.0%, respectively) and females who indicated that they would not want their husbands circumcised (NSS, 92.9% and 93.5%, respectively).

Conclusions: Targeted MMC sensitization activities increased the level of community awareness about important MMC messages that should be disseminated before MMC services commence. Pre-post surveys can inform program managers when messaging is needed.

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MOPE0629

POZ in the city - AIDS concern anti-stigma youth empowerment programme

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Issue: In Hong Kong, NGO and PLHIV have been working hard to break the myths of HIV and change the attitudes of public. To deepen and broaden the empowerment programme, A Participatory Communication toolkit for replication of the approach by other agencies will be released in summer 2010.

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MOPE0630

Fighting stigma and discrimination in Zambia through entertainment such as the hosting of a fashion pageant comprising of people living with HIV/AIDS

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Issues: Face of HIV/AIDS has been associated to women who are mostly stigmatized and discriminated despite many organizations fighting for them. Women are the most infected and affected therefore most stigmatized.

Description: ZNAVVS introduced the Miss Stigma free contest where women are selected from the support groups for PLWHAs. The pageant is not based on beauty or slenderness of the body but on their HIV status and held just before the World AIDS Day commemoration in order to carry out mass sensitization against stigma and discrimination. Miss Stigma Free contest is for PLWHAs and implemented by ZNAVVS. This is contest is centered on disseminating information on HIV/AIDS through entertainment. The current Miss Stigma Free is committed to working with pediatric support groups for children living with HIV/AIDS.

Lessons learned: Stigma is being fueled by confidentiality, as when it stops becoming a confidential thing no one will want to hide as such no more stigmatization. The women that have participated in it the last two contests have gone on to talk openly about their HIV status. The participants start to talk first among themselves about their own stigmatizations then eventually to the general public. Men also want a contest to help them open up about their HIV status women need to become masters of their own destiny in the fight against stigma and discrimination as they are fertile ground to win the battle from.

Next steps:
- Private and public sectors should embrace programs that address stigma and discrimination against women in communities;
- Have the contest into a national and regional event;
- Renown fashion designers should be involved in the fight against stigma and discrimination.

- Break the silence by doing away with confidentiality
- Introduce Mr Stigma Free contest to strengthen the fight against stigmatization and improve male involvement in various communities.

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MOPE0631

Social marketing of condom by a self help group - a step forward to sustainable behavior change to prevent HIV/AIDS

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Issues: Durjoy Nari Shangha (DNS) a self help group of the female sex workers introduced social marketing of condom through its peer outreach workers to the female sex workers for combating HIV/AIDS and improving the sexual and reproductive health in Bangladesh.

Description: DNS is implementing HIV/AIDS prevention, funded by GFATM and managed by Save the Children-USA. DNS with its own fund collect condom from the wholesale market, sell condom to female sex workers through peer outreach worker and depot holder, and ensure use of condom at every sex act. Experience shows more than 13000 sex workers are buying condom from POWs and depot holders through social marketing of condom from 15.06.2008, gradually condom use rate are being increased. Condom used by 10000 sex workers in October, November and December 2009 is 364596, 371547, 428412 respectively. The minimum profit from this approach used for the welfare of sex workers. Sex worker’s for sex worker’s- the vital slogan of the project and it gives them ownership feelings and CBO becomes strengthen.

Lessons learned: Government and other organization can follow this approach to combat HIV for a sustainable development.

Next steps:
- Public health campaign and are giving training to the SW to negotiate with clients. In Bangladesh people conservative and feels shy about condom buying from outlets, sometimes they are unable and unwilling to buy it due to lack of confidentiality and social barrier.

- Introduce Mr Stigma Free contest to strengthen the fight against stigmatization and improve male involvement in various communities.

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MPE0632
TV game show on HIV and AIDS in Manipur, India creates awareness in dangers of stigma and discrimination associated with HIV and AIDS
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Issues: In Manipur, India stigma and discrimination associated with HIV and AIDS continues to prevent People Living with HIV and AIDS from accessing services and testing. Problems is lack of awareness of the dangers posed by stigma and discrimination. “Right-Discrimination Through Awareness - A TV Game show” is an Effective Interpersonal Communication through TV game show structured around questions related to stigma and discrimination associated with HIV.

Description: The 69 episode show was broadcast every week from 13 Sept, 2008 to 27 December, 2009 over ISTV Network having approximately half a million viewers in four districts of Manipur. Cash prizes for every correct answer and prizes for best questions were given. The questions were then answered by doctors, NGOs leaders, PLHAs, Advocates, Journalists participated as experts. 1575 students were participated as audiences. Viewers participated through mobile sms.

Lessons learned: According to endline survey conducted after the show 93% viewers wanted to join the show, 82.23% family members showed interest and 71.87% discussed it, 69.03% discussed with friends, 90.11% felt it was useful in educating viewers on HIV/AIDS, 93.80% felt it will help decrease stigma and discrimination, 84.93% felt it increased the knowledge of HIV and AIDS existing services for PLHAs, 68.90% felt PLHAs will come out for accessing services. Interview of focus group said the show will decrease self-stigmatization of PLHAs and increase positive attitude response of general population.

Next steps: The show was in English as Manipur is multiracial and could not benefit English speaking communities. Next we plan to make the show in different languages to cover different linguistic groups of Manipur. It can be replicated by different cable networks or TV stations.

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MPE0633
Making HIV a constitutional issue in Zimbabwe
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Issues: Zimbabwe has experienced significant political and economic instability. In September 2008, the Global Political Agreement (GPA) was signed by Zimbabwe’s three primary political parties in which a 19-month constitutional reform process was proposed and established as a key opportunity for the country to contribute to rebuilding Zimbabwe. Recognised as a national emergency, the HIV epidemic has impacted on the lives of all Zimbabweans. An analysis of the current Zimbabwean constitution indicates limited protection for the rights of women, men and young people infected and affected by the HIV and AIDS epidemic.

Description: Recognising the reform process as an opportunity, SAIFADS and the National Network of People Living with HIV (ZNWP+) with funding from Oxfam Novib, ZNNP+, and UNAIDS implemented a provincial chapters of ZNWP+, twenty community dialogues (2 per province) were held. The dialogues were platforms for people to debate and document their expectations regarding the rights and protection that Zimbabwe’s Constitution should afford for PLHIV. The media was also identified as a key stakeholder and after a key message for PLHIV was crafted it was disseminated through print, radio and television interviews nationally and regionally.

Lessons learned: Despite its politically sensitive nature, the initiative was well-received by government and civil society. An initial consultative meeting was instrumental for introducing the project, gaining buy-in and establishing partnerships with “gatekeepers” and other stakeholders in the constitutional reform process. Legal resource persons were engaged to guide the contributions of PLHIV. Reaching out to people in communities enhanced their interest and overall participation in the national reform process.

Next steps: Following the completion of the community dialogues, a national policy dialogue will be held. Messages documented in community and national dialogues were fed into national reform process.

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MPE0634
Stigma and discriminatory attitudes and perceptions in Accra and Tema metropolis in Ghana towards a volatile population see most at risk populations (MARPs) and how do MARPs see themselves in the context of HIV and AIDS?
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Background: The HIV prevalence among Ghana’s general population (GP) is 1.9% (1.4% in 2009). Various factors including stigma and discrimination (S&D) may increase the risk for HIV to the population. The higher HIV prevalence in the general population increases the risk of HIV to the MARPs. The study aimed at eliciting stigma and discriminatory attitudes of GP on MARPs (female sex workers [FSW], non-paying partners [Non-PP] and men having sex with men [MSM]) and MARPs views of themselves in the context of HIV in Accra.

Methods: A cross-sectional study was conducted from November 2008 to January 2009 in the Accra Metropolitan Area (AMA) (44.2% female) were recruited at random from places of worship, markets and 200 police personnel (43.2% female) from 10 police stations. MARPs (606 FSW, 200 Non-PP and 200 MSM) were recruited using a consecutive sampling technique. Excel spreadsheets and SPSS 12 were used for analysis. Cross-tabulation analysis of background variables and perception of discrimination were used to assess statistical significance.

Results: Approximately 60% of GP would not welcome FSW into their homes. Though about two-thirds of GP would not ostracize them from the community. 54.6% of police and 69.1% of the GP would not welcome MSM into their homes and half would ostracize them. More than 73.3% of GP did not favour decriminalising sex work or homosexuality. MARPs themselves also had discriminatory attitudes: 23% of FSW would ostracise an FSW and more than 63.4% of FSW would ostracise an HIV-positive FSW. 27.5% of MSM would ostracise a fellow MSM.

Conclusions: The study showed that MARPs were both recipient and perpetrators of S&D. Fear of S&D results in MARPs not accessing HIV prevention and treatment programmes. Stigma and human rights programmes for MARPs should be strengthened through appropriate policies and legislation to improve HIV control programs.

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MPE0635
Reducing of stigma and discrimination of HIV-positive people in Ukraine through realization of care and support programs: experience of ICF Caritas, Ukraine
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Issues: The problem of stigmatization of people with HIV+ status is very actual in today’s Ukraine. Despite of legislation which guarantees access to treatment and care for PLHIV, many medical workers refuse to help them. Regional AIDS centers can provide all qualified assistance but people afraid to visit them because of fear of stigmatization. Existing state social services don’t provide essential social and common services. This gap is filled by HIV-service organizations but to their client also means to be a voluntary bearer of stigma.

Description: Caritas Ukraine worked out its own approach of providing care and support services to PLHIV together with other people in need. Since 2005 “Home Care” program is implemented in 6 cities of Ukraine. Its main aim is improvement of the quality of life of PLHIV, disabled and seniors by providing medical, social and psychological home care. PLHIV are not seen as special category - they considered as people who extremely need outside help and support to get together with other vulnerable groups.

Results: Such approach was especially effective in the project „Social integration center for PLHIV, their family members, disabled and seniors” which is implemented by Caritas-Odesa from August 2008. In this center all people can receive consultation from social worker, lawyer or doctor, visit mutual support groups, use the washing machine, watch video. Coming to the center HIV+ person doesn’t afraid that his status will be known as different people visit it. When the person tells that he’s a client of Caritas in doesn’t mean for common people that he’s HIV+.

Conclusions: Proposed approach reduces stigmatization of PLHIV. When they are considered together with their family members, disabled and seniors they don’t feel themselves isolated from the society, their self-appraisal and life quality improve.

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MPE0636
Using a social capital behaviour model to reduce stigma and increase HIV testing: insights from concern worldwide Ethiopia
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Issues: Stigma remains one of the biggest challenges to delivery of HIV services in Ethiopia. In the Ethiopian 2005 behavioural surveillance survey fear of stigma was identified as a perceived barrier to prevention such as voluntary testing and accessing treatment. Most people hide their disease so that they can work or have their children go to school. Many refuse to accept their ill- ness so do not go for testing or treatment and needless many people died alone with no support from their neighbours or family.

Description: In 2006 Concern Ethiopia HIV programme adopted a social capital behaviour change approach called community conversations (CC) for a rural and urban area. This is a method of dialogue conducted over one year that has engaged the community in examining their and the community norms, values and principles and what effect those norms and values have on relationships individuals, families, friends and in particular what effect they have on the HIV epidemic.

Lessons learned: A study undertaken in 2009 using qualitative methodology showed a reduction in stigma and discrimination in both areas. This reduction was observed despite the lack of local supportive VCT service, being tested and publicly disclosing their status. Of the 224 people interviewed 194 said they had been tested in the last two years as a result of the programme. Most of them would have been free to work and are playing an active role in the community. The success of the approach is that the community does the thinking, actions and decisions are generated from the testing ownership and resting the responsibility for transformation with them. The presentation will explore the social capital...
MOPE0637 Creating a community dialogue on HIV stigma reduction: an innovative web-based forum for gay and bisexual men

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Issues: An intervention to address stigmatizing behaviours directed toward HIV+ men and enhance the sexual health of gay and bisexual men was developed through a community-based process involving HIV prevention workers, public health, government, and researchers, representing a range of ethnocultural, francophone, HIV+, and transgender communities in Ontario, Canada.

Description: A well-publicized website, hivstigma.com, was created to invite gay and bisexual men to participate in an on-line dialogue about HIV stigma in their communities. Eight bloggers moderated lively debates over 6 months. There were 20,844 unique visits to the site averaging more than 5 minutes each; 4,384 visitors returned more than 10 times.

Lessons learned: The site succeeded in providing a forum that generated substantial dialogues and impassioned discussions of the consequences of HIV stigma; what stigma and rejection mean and how they might be better understood and addressed; problems of avoiding HIV versus avoiding HIV-positive persons and the relational and emotional consequences of the latter; parallel and intersecting stigmas experienced around homophobia, age, race, and trans/gender; how HIV stigma and rejection might be challenged; the ethics and practicalities of disclosure; implied versus explicit disclosure; the difficulty and situationality of disclosure; and (informed) consent in HIV transmission; ideas and divisions in making gay community; community building versus stigma; and the morality of disclosure and HIV risk taking.

Next steps: In the contemporary situation, where there are few opportunities for community-wide forums, the site stimulated a dialogue where men could reflect and debate how HIV stigma impacts personal interactions, HIV transmission, and the well-being of community members. An evaluative survey conducted through a separate popular cruise website showed significantly greater awareness of stigma issues faced by HIV+ men following the intervention.

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MOPE0639 The influence of a community-based HIV/AIDS treatment project on HIV/AIDS knowledge, attitudes and prevention practices in rural Uganda

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Background: A community-based antiretroviral therapy (CBART) program has been operating out of Rwimi sub-county in Western Uganda since 2005. This CBART program engages community volunteers and treatment advocates to support antiretroviral treatment (ART) monitoring and ART distribution. The purpose of this study was to evaluate whether the involvement of the community in this program exposed the broader population to increased knowledge and awareness of HIV and ART and led to improved HIV prevention practices.

Methods: Surveys were carried out from September to December 2009 with a stratified sample of 400 adult residents from Rwimi sub-county who were not enrolled in the CBART program and 200 adult residents from a similar formal CBART program in order to compare differences in knowledge, attitudes and prevention practice indicators. Focus groups were also held with selected participants to further explore the differences observed between the two sub-counties.

Results: Residents of Rwimi sub-county consistently scored lower than the groups and the CBART program in knowledge of ART services and the percentage of individuals who tested for HIV, had a higher percentage still engaging in unprotected sex, and had a higher degree of stigma in the community, though none of these differences were statistically significant. In the focus groups, participants from Rwimi mentioned they were only partially aware of the existence of the CBART program and that no education or awareness of HIV was provided by the program. Participants also mentioned specific activities that CBART programs could undertake to ensure that local HIV+ in the community and better sensitize community members on HIV.

Conclusions: We found that the more involved the CBART program does not necessarily lead to improved knowledge, attitudes and practices of the surrounding population. Instead, deliberate efforts should be made to integrate community awareness and sensitization to HIV to gain the full benefits of a CBART approach.

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MOPE0640 HIV, human rights and social inclusion: the experience of HIV post-test clubs over the life of the ‘Reducing Community Vulnerability to HIV and AIDS Program’ in Kenya, Zambia and Zimbabwe

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Issues: HIV and AIDS-related stigma and discrimination constitutes one of the greatest barriers to dealing effectively with the HIV epidemic. Stigma and discrimination limits open discussion about prevention, treatment and the need to care for and accept HIV-affected people as equal members of the community.

Description: From 2004 to 2009 Plan International Australia and in-country counterparts implemented a program in Kenya, Zambia and Zimbabwe to reduce community vulnerability to HIV and AIDS. Multiple activities were used to positively influence attitudes and behaviours towards people affected by HIV. These included community-based awareness-raising about human rights, HIV prevention and treatment, support for health providers and training and support for a range of community HIV service groups. Program activities also strengthened or facilitated the formation of HIV-focused post-test clubs (PTCs). PTCs received agricultural inputs and training in income generation and improved farming methods.

Lessons learned: PTC group interviews revealed significant shifts in community attitudes towards people living with HIV. PTC members reported positive changes in knowledge and practice: as individuals, among family members, fellow PTC group members and in the wider community. Previous patterns of rejection and separation - at household and community levels - diminished. PTC members also reported improved livelihoods and increased access to HIV information and mutual support through group involvement.

Next steps: Changing attitudes and practices towards people affected by HIV requires multiple approaches that simultaneously demystify HIV transmission, create demand for testing and treatment, promote the rights of HIV-affected people and strengthen the service delivery capacity of community service groups and health providers. Desired changes can be affected by HIV - take time and do not always occur in a linear fashion. More research is needed to better understand context-specific issues that affect the success of similar HIV programs.

MOPE0641 Indonesian nurses’ HIV knowledge, religious beliefs, tolerance towards HIV/AIDS, and perception of HIV-stigma

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Background: The HIV incidence in Indonesia is growing rapidly. Often, people living with HIV (PLWH) can not access health care services because of the fear of encoun-

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Abstract Book Volume 1 | www.aids2010.org

197
have been discriminated against and stigmatized by nurses. Thus, stigma may influence the low antiretroviral therapy coverage in Indonesia (46%). The purpose of this study is to determine the extent to which nurses’ HIV knowledge and religious beliefs affect their attitudes toward HIV/AIDS and their perception of HIV stigma.

**Methods:** Descriptive correlation study, using a questionnaire covering demographic information, HIV knowledge, religious beliefs, tolerance of PLWH, and perception of HIV stigma. A convenience sample of 300 nurses participated from hospitals serving Islamic, Christian, and Catholic populations in Jakarta, Indonesia.

**Results:** The sample is predominantly female, educated in diploma nursing programs, and not educated for HIV/AIDS care. The level of religious beliefs is high with a moderate level for tolerance toward PLWH. Preliminary data analyses reveal a significant association between nurses’ knowledge, tolerance of persons with HIV/AIDS, religious beliefs and perception of HIV stigma as important determinants of care for PLWH.

**Conclusions:** HIV/AIDS education of nurses is necessary to improve the quality of healthcare and minimize stigmatization toward PLWH.

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**MOPE0642**

**Scaling up the GIPA pyramid - the empowerment of PLHIV speakers towards social change leadership - an Australian perspective**

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**Issues:** Being HIV-positive and working in the HIV sector presents many challenges, including personal disclosure. Working with PLHIV who want to use their lived narrative to reduce discrimination is a driving force for them to develop their capacity to become HIV educators and community leaders. PLHIV’s understanding of guiding principles such as GIPA, universal human rights, social inclusion and opportunities for self-determination.

**Description:** The Positive Speakers Bureau (PSB) evolved from the active community engagement and support of individual and systemic social change across all levels of the HIV response. Speakers’ goals are to reduce new HIV infections, challenge concepts of stigma and discrimination in the wider community. The PSB has empowered PLHIV speakers to build their capacity to re-integrate into the community and to reorientate them towards greater leadership roles. Two case studies will illustrate transformative changes.

**Lessons learned:** Building links and trust between MSM, bisexual and heterosexual PLHIV was challenging. A holistic approach, strong peer support and community development principles helped unify the speakers. The PSB developed a training methodology for leadership in the HIV response and intergenerational mentoring for emerging leaders. The PSB has promoted program reassessment to inform the ongoing development of support for PLHIV in their capacity to engage in HIV education in the community and secondary schools. Each year, our speakers launch World AIDS Day at Parliament with the State Health Minister, involving long term strategic planning to influence government policy and positioning PLHIV in places of leadership.

**Next steps:** The PSB program provides a readily transferable leadership model under the GIPA Principle and diverse options for PLHIV to become advocates and leaders - constantly striving to develop greater potential. Increase visibility of PLHIV MSM leaders in the community.

**Continuous work:** To work with, educate and challenge the wider community’s negative stereotyping of PLHIV.

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**MOPE0643**

**Sri Lanka police and HIV/AIDS**

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**Issues:** Sri Lanka is categorized as a country with a low prevalence of HIV infection. Soliciting sex, substance use is illegal and homosexuality is a punishable offence. Harassment by law enforcement authorities is common. Police practice these behaviors to go underground and prevent them from accessing HIV prevention interventions.

**Description:** The hot spots in the business city of Colombo were mapped by the investigators and the Police stations closer to them were visited after obtaining permission from the management. The programme was launched with the objective of sensitizing police officers in HIV and changing their attitudes for an enabling environment for HIV prevention. Baseline and post intervention focus group discussions were held for evaluation.

**Lessons learned:** Sensitization programmes were held in hundred police stations and reached seven thousand six hundred police personnel during a period of one year. Nearly 96% were aware that unprotected sex is the main method of transmission of HIV. The knowledge that condoms prevent HIV was increased to 100% at the post test discussion. Almost all had arrested sex workers and discovered carrying condoms. Subsequently their attitudes towards sex workers had changed and the majority agreed that arresting sex workers will hinder prevention efforts. Few were adamant that the law should be exercised and arrests should go on. Twenty police stations have initiated community outreach programmes to empower youth and reduce the risk of HIV. HIV/AIDS posters and leaflets were available in almost all the police stations.

**Next steps:** The link the National STD/AIDS Control Programme developed with the Police will be continued with a follow up programme to make the Police aware of the intervention in HIV prevention and be a partner in community empowerment and also reducing police harassment of marginalized groups.

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**MOPE0644**

**Are faith based organizations right to assume low risk of sexual activity among youth?**

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**Issues:** Most religious organizations approach the issue of HIV prevention among young people by stressing abstinence. They sometimes use the ABC message. After taking ABC, they believe that the person is safe. No doubt, this approach can change the C from Condom to some other word. Condom is not emphasized and not talked about at all. Because of the religious values they hold, it is reasonable that they approach HIV prevention with an emphasis on abstinence and being faithful. The danger is that the generalized epidemic could continue despite the increase in condom promotion among perceived high-risk groups, because infections will continue to occur in the “condom litterate” Faith Based Organizations.

**Description:** Study among youth age 13 - 19 in 4 Christian Secondary Schools in Nigeria. A total of 61% of the workshop participants are not sexually active, while 39% are sexually active. This result is just 11% lower compared to the generalized population from another study. Among those who are sexually active, 11% use condoms vs 17% from the generalized population from another study. While 89% did not use condoms. A total of 54% of the sexually active youth had sex with two or more partners while 46% had sex with only one partner. From the total respondents, 98.4% say that they are willing to abstain from sex until marriage.

**Lessons learned:** Christian youth are highly at risk of contracting HIV because of their level of sexual exposure. Condom use among this population is too low. Though most of the respondents are willing to abstain till marriage, the reality is that some may end up in sexual relationships again. It is therefore irresponsible for Faith Based Organizations to leave them as “condom litterates”.

**Next steps:** HIV and AIDS intervention programmes of Faith Based Organizations should include condom education as an integral part of their intervention.

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**MOPE0645**

**Uncovering and analyzing the intersection between violence against women and HIV/AIDS with a radio initiative in Nepal**

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**Issues:** Research by Equal Access Nepal indicates that women experiencing violence towards women with HIV/AIDS are overlapping populations -- women suffering violence are at risk of HIV contraction and women with HIV are highly likely to face violence.

**Description:** The radio initiative Samajghadi (Mutual Understanding), with one million regular listeners, deals with issues surrounding VAW and HIV/AIDS. The program provides a space to challenge subordination and discrimination against women and to compel men to rethink deeply held patriarchal values and attitudes towards women which are identified as root causes of VAW and HIV. Feedback shows that cultural communication barriers are being broken - before broadcasting, Equal Access' baseline research showed that half of survey respondents did not talk about sex and one third believed that there are times when women deserve to be beaten. Through the Twin Pandemics of HIV/AIDS and Violence Against Women-Baseline Survey Report 2008, Equal Access Nepal engaged communities.

**Lessons learned:** The program provides a space to challenge subordination and discrimination against women and to compel men to rethink deeply held patriarchal values and attitudes towards women which are identified as root causes of VAW and HIV. Feedback shows that cultural communication barriers are being broken - before broadcasting, Equal Access' baseline research showed that half of survey respondents did not talk about sex and one third believed that there are times when women deserve to be beaten.

**Next steps:** A mass education campaign that will:

1) target men and prevent promulgation of HIV/AIDS and VAW,
2) increase the reach of programs directly empowering and airing voices of survivors, and
3) pressure government to change discriminatory policies allowing women to remain sexually active.

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**MOPE0646**

**Fight against HIV by the power of art in rural China**

R. Zhang

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**Issues:** In the rural areas of China, where information access is limited as well as people’s education, HIV is fueling the vulnerability of people due to lack of preventive intervention, misinformation on the epidemic and severe stigma toward PLHIV and their families.

**Description:** Red Cross Society of China is implementing community based art performances to combat HIV and reduce stigma. They are working with PLHIV volunteers and rural artists to develop and present HIV themed drama, traditional folk songs, “talk shows” in local art festivals gatherings to educate the public with HIV prevention and anti-stigma mes-
MOPE0647
Leveraging HIV clinical services with community empowerment
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Issue: For most PLHIVs in Osun state, the challenge of picking up anti-retroviral treatment due to its unavailability. It is needed and this challenge is compounded by poor treatment literacy among PLHIVs accessing ARV. The treatment literacy of PLHIV is low causing them to misuse or abandon treatment leading to drug resistance. For many PLHIV, high level stigma within the community discourages them from seeking treatment from nearby health centres to access treatment.

Description: To promote community identification with PLWH, an interactive participatory approach was adopted. Community leaders and stakeholders were trained and a core of community traditional rulers, community gatekeepers were trained and a core of community people are sensitive to the ways they are described because of their status and this affects disclosure and uptake of ARVs by them. Again, community members would promote access to HIV services if they were fully mobilized.

Next steps: Active community engagement with PLWH will disseminate campaign materials and messages, to promote de-stigmatization of PLHIV and increase access to treatment amongst community members.

MOPE0648
Role of information campaigns in promoting access to services for HIV-positive women in Ukraine
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Issues: Over 40% of people with HIV/AIDS in Ukraine are women of reproductive age. In 2007, the number of IDUs of HIV-positive mothers are abandoned to the state. Around 40% of mothers at risk of abandoning their children are active injection drug users (IDUs). Together, IDU and HIV status increase the likelihood that a pregnant woman will not access prenatal care, PMTCT, or drug treatment, e.g., substitution therapy (ST). Female IDUs lack information about ST availability; only 19% of ST clients in Ukraine are female.

Description: HealthRight implements MAMA+ program to provide HIV-positive
women with comprehensive services and reduce infant abandonment. HealthRight and Ukrainian Foundation for Public Health have adapted MAMA+ to reach IDUs. The two organizations also launched an information campaign to promote de-stigmatization of women IDUs and increase awareness of ST for women IDUs. The project produced a documentary about an HIV-positive IDU mother, her family, and her experience with ST. The project created posters targeting women IDUs to raise awareness of ST, and targeting medical providers to promote tolerance toward IDUs and awareness of ST.

Issues: HIV-positive female IDUs experience double stigma, contributing to poor access to care. The information campaign illustrated demand for objective, non-stigmatizing information about ST and other services including of the documentary on Kyiv television, the ST hotline received hundreds of calls from interested IDUs and their relatives.

Next steps: Explore different contexts for programmes targeting the special needs of HIV-positive female IDUs. As important as service availability is ensuring potential clients have accurate information about ST, AIDS treatment, and PMTCT. HealthRight and UFPH will disseminate campaign materials online and via televisions. The campaign aims to improve attitudes towards ST and female IDUs, and double the number of female ST clients in Ukraine.

MOPE0649
Building a supportive policy environment for a comprehensive harm reduction programme for intravenous drug users in China
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International HIV/AIDS Alliance in China, Kunming, China

Issues: HIV prevention programmes for IDU operate at the interface between Public health authorities and Public Order responses to drug use. Harmonizing the two responses is essential if health outcomes are to be maximized.

Description: In 2008 Levi Strauss Foundation funded the International HIV/AIDS Alliance to build a supportive environment for a comprehensive harm reduction programme in Emeli City, Sichuan, China. The programme was implemented by the local CDC, supported by the Provincial HIV/STI Association and designed around the central involvement of a group of IDU. An outcome expectation assessment was conducted at the outset that revealed unrealistic expectations on the programme from police, families of IDU, health care workers and neighbours. A local stakeholder exchange platform (which included the Public Security Bureau) was established as a mechanism for addressing these expectations and monitoring programme progress. The intervention gave IDU peer educators a critical role in needle exchange and Methadone maintenance treatment adherence support. By July 2009 the local CDC was reporting the highest MMT adherence rates in the province (>90% by local definitions of retention) and minimal adverse impact from Public Security activity. The level of peer involvement has been judged locally to be a key factor in programme success.

Lessons learned: The following have been critical to the success of this intervention:

- Placing peers at the centre of the intervention design.
- Building the relationship between the public health and public order authori-
ties at local level.
- Delivering realistic expectations on intervention outcome.
- Secure buy-in at the provincial level from a recognized public health agency.
- Being persistent but patient with pushing the importance of peer-involve-
ment.

Next steps: The programme is currently being scaled up to an additional site. With funding from Levi Strauss Foundation, Alliance is supporting the transfer of the model and attendant implementation skills to a new site.

MOPE0650
Rethinking drinking: young men in Vietnam promote social change
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Issues: Alcohol is strongly associated with young men’s HIV risk in Vietnam, both sexual risk taking and drug use initiation which contribute to the majority of new HIV infections. Alcohol use is influenced by gender and social norms. Young men describe pressures to get drunk with friends and/or colleagues to bond as a group, prove masculinity, celebrate occasions and cope with emotions.

Description: Save the Children and the Ministry of Labor’s General Depart-
ment of Vocational Training aim to prevent HIV among young men between 15 and 24 years of age in 20 vocational schools in 5 provinces. A survey in 2009 of a random sample of male students found that 71% had been drunk at least once in the last 3 months. As part of a comprehensive approach to HIV prevention, 200 peer educators facilitate weekly education sessions with 1,500 students using a risk reduc-
tion curriculum with discussions on substance use and analysis of risks and pressures. Students who participate report reducing their alcohol use, getting drunk less frequently and regularly sharing their knowledge and experiences with peers. Also, interactive events focused on getting drunk and organized by peer educators for all students on campus feature music, comedy and creative communication on alcohol and HIV. Reported and observed social changes on campus have led to celebrations with less alcohol and positive recognition from peers for reducing drinking.

Lessons learned: Young men are interested in learning about health and HIV prevention, reflecting on the pressures and influences and support-
ing friends to make thoughtful decisions. Youth-led communication with small and large groups is affecting change.

Next steps: Exploration of specific ways young men can resist pressures and make their own decisions about when and how much alcohol to drink in other contexts is needed to prepare them for life off campus and after the school years.

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MOPE0651
Reducing violence against women (VAW) and HIV by engaging men in India using multi-media campaign and community leadership programme
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Issues: Global studies have shown that fear of violence increases women’s vulnerability to HIV and they are unable to negotiate safe sex, access health and legal services. A study conducted by Breakthrough in three states of India - Uttar Pradesh, Maharastra and Karnataka reveals poor knowledge of the Protection of Women from Domestic Violence Law. While awareness of HIV prevention is as high as 63%, consistent use of condoms is at 10%. Women fear violence or that their partners will seek sex elsewhere if they insist on condom use.

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MOPE0652
Communicating HIV prevention: a study of current approaches to male circumcision and multiple concurrent partnerships in Uganda and Zambia
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Issues: Evidence has shown the importance of multiple and concurrent sexual partnerships (MCP) as a driver of the HIV epidemic in Southern and Eastern Africa. A study assessing male circumcision (MC) has been identified as an effective tool in the prevention of HIV transmission. As a result there are currently a range of behaviour change interventions implemented across these regions, including in Zambia and Uganda.

Description: The Panos Global AIDS Programme undertook a study in both countries to examine communication programmes and policies around MCP and MC. Building on communication for social change approaches, the study aimed to assess how the current interventions helped address multiple concurrent partnerships and increase uptake of male circumcision, and access social drivers that shape people’s behaviour and attitude toward these. Research was conducted in 2009 and 2010, and included interviews with policy makers and focus group discussions with communities.

Lessons learned: Issues relating to MCP and MC services were complex. In Zambia, demand for MC services outstripped supply. In both countries there was limited engagement of civil society around the issue. Individuals’ attitudes towards both MC and MCP were shaped by traditional norms and perceptions surrounding masculinity. Yet communication and policies addressed these to a limited extent. For example, while the One Love AIDS campaign in Uganda emphasized the leadership of men in driving behaviour change it did not engage with and address the underlying drivers of male behavior, including social norms.

Next steps: Greater emphasis on communication for social change approaches to MCP and MC is needed, as is greater civil society engagement with the issues, including advocacy around service provision and resource allocation to these. Communication on issues relating to MCP and MC needs to go further in addressing social drivers shaping such behaviour, including norms of masculinity.

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MOPE0653
Positive voices - oral testimonies to amplify voices of women affected by and living with HIV and AIDS in Pakistan
S. Ali
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Issues: Women living with HIV/AIDS in Pakistan are rarely seen let alone heard. Thus, little is known about how AIDS impacts them and their access to HIV services. Supporting HIV+ women in sharing their experiences by recording their stories can provide visible, personal, first-hand accounts to help policy-makers understand ground realities. This can improve access to services and reduce impact.

Description: Panos’ Global AIDS Programme with support from Panos London’s Oral Testimony Programme, has trained 23 women from Sri Lanka, India and Pakistan (16 of whom are HIV+) to record in-depth, one-to-one interviews with women living with HIV/AIDS.

Lessons learned: The national workshops provided a safe space for women to reach out to other women and share their stories. Confidence in participants rose as they gained confidence in sharing their stories, and the final workshops became a means of support for each other. Women’s networks further broadened by reaching out to other organisations for support and exchange.

Next steps: The key issues revealed within the testimonies will be presented as the benefits and challenges for patients in the future, and in addition, the testimonies will be shared with service providers, and contribute to improved services and policies for women living with HIV/AIDS across South Asia.

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MOPE0654
Engaging the youth and mobilising communities through music and sports: a multi-media approach to prevent HIV and AIDS in the North-Eastern Indian states of Manipur, Nagaland, Mizoram and Meghalaya, involving youth in programme activities particularly through development and dissemination of messages on HIV
A. Johri1, M. Agrawal2, P. Ganji3, K. Kishore4
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Issues: HIV prevalence in Manipur, Nagaland and Mizoram continues to be higher as compared to other states of Northeast. The epidemic is driven by injecting drug use and unprotected sex. Over one third (about 65,000) of the IDU population in India belongs to these states which otherwise account for just about 0.5% (5.3 million) of India’s total population. The most affected are the youth in the age group of 15- 29 years. The youth of these states are educated but unemployment and easy accessibility to drugs from across the international border increase their vulnerability. Music and sports are an effective tool to reach out to them.

Description: The multi-media campaign on HIV/AIDS, targeted youth aged 15 - 29 in the three north-eastern states. The campaign focused on increasing risk perception particularly about injecting drug use and unprotected sex, stigma & discrimination and HIV related services. It used a combination of music competitions and football tournaments massed at district level culminating into the state level mega events. These were further amplified through the use of TV, radio, newspapers and outdoor media. Over 100 faith based organisations were involved in the campaign. A special effort was made to reach out to the out-of-school youth through training of youth clubs at district, block and village levels. BCC messages were developed and disseminated by youth themselves. The winners of the music competitions positioned as ‘youth icons’ are further taking messages to the community through road shows in rural areas. The campaign directly reached out to approximately 5,00,000 people with much higher indirect reach through mass media.

Lessons learned: Directly engaging community in developing and disseminating HIV messages through multiple & popular formats enhances programme ownership which is key to HIV prevention.

Next steps: Based on the impact evaluation and feedback, the campaign will be up-scaled in other states.

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MOPE0655
Importance of social norms and interpersonal discussions in evaluating behaviour change campaigns
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Background: From 2007 through 2009, BBC World Service Trust produced and broadcast an advertising campaign aimed at normalising condoms in four high HIV prevalence states of India - Karnataka, Tamil Nadu, Andhra Pradesh and Maharashtra. The primary target group for the campaign was men of reproductive age, 15 to 49 years and a particular emphasis on men with non-regular sex partners within the previous year. Formative research identified lack of social support as a major barrier to conservative condom usage and high risk men who felt negatively judged by other people. Also, prevailing cultural and social norms do not encourage engagement in sexual conversations. As a result, high risk men and their partners feel embarrassed to discuss condom use for better sexual health. The campaign, therefore, focused on positioning condoms as a product for responsible men, and on encouraging discussion around condoms.

Methods: A quantitative endline study was conducted (sample of 4125 men) across high prevalence districts in the 4 states including interviews with both exposed and not exposed to the campaign.

Results: The campaign succeeded in challenging social norms by encouraging men to discuss condoms without shame or embarrassment. 47% of those exposed had discussed condoms in 30 days preceding the survey, compared to only 18% of those not exposed. The percentage of those embarrassed to buy and carry condoms was significantly higher among those not exposed to the campaign. Among high risk men, the level of exposure to the campaign was strongly correlated to the variance of discussion about condoms, such that higher levels of exposure related to positive discussions about condom use. This discussion, in turn, impacted their attitudes, self-efficacy, social norms and intent to use condoms in future.

Conclusions: This study provides evidence to establish the importance of including interpersonal discussion in communication campaigns.

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MOPE0656
Developing HIV and AIDS workplace programmes in community service organizations in Germany
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Background: The STOP AIDS NOW! Ethiopia project managing HIV in the workplace (2008-2010) supports a network of 35 CSOs in Ethiopia to develop and implement HIV and AIDS workplace policy (WPP). As part of the three phases applied research and co-development of workplace programmes was conducted between October and December 2009 with objectives of analyzing the processes employed in development of WPP and documenting promising practices.
Background: The aim of this study was to determine the perceptions and acceptability of male circumcision among the young, older men and women.

Methods: A total of eleven (11) focus group discussions were conducted in eight of the nine provinces in South Africa. Issues that were researched included:

1. Acceptability of male circumcision among different cultural groups,
2. Barriers to male circumcision.

Results: The study found that male circumcision is acceptable to both men and women. The purpose of circumcision is seen to prevent HIV infection. Participants felt that male circumcision can increase sexual pleasure and decrease sexual inhibition.

Conclusions: There is a need for sexual and reproductive health promotion and intervention in the context of male circumcision.

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MOPE0659 An evaluation of Zimbabwe’s national behaviour change programme: results of the mid-term evaluation survey

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Background: In 2007, the Zimbabwe Ministry of Health, National AIDS Council of Zimbabwe and UNFPA launched the National Behaviour Change Programme (NBCP) that focuses on providing an enabling environment to increase safer sexual behaviours, reduce risk behaviours, increase utilization of HIV prevention services, and build capacity. A bio-behavioural baseline survey was conducted in four provinces prior to programme implementation. The mid-term evaluation (2009) compared reported knowledge, behaviours and attitudes within a representative adult sample between programme and comparison districts.

Methods: A representative house-to-house survey was conducted in six districts (programme=4, comparison=2) in two provinces in rural Zimbabwe. All 18-24 year olds and one-in-three 25-44 year olds living in selected enumeration areas were invited to complete a questionnaire. Differences were compared in reported knowledge, behaviours, and attitudes between programme and comparison districts controlling for differences at baseline.

Results: 2,746 (85.6%) adults (64% female) took part. In programme districts, 68% reported being exposed to at least one programme component (57% programme meeting; 27% at 11-session course). Participants from programme districts were more likely to report community leaders had spoken out against male circumcision (p=0.001) and against age-disparate relationships (p=0.086) and were more likely to have disclosed their HIV status (p=0.021). While there was an increase in HIV knowledge, a positive change in attitudes towards stigma and HIV testing, a decline in the proportion reporting two or more partners (14% to 10%), and an increase in HIV testing (36% to 50%), none of these differences were between programme and comparison districts. There was no difference in reported level of concurrency.

Conclusions: The majority of adults in programme districts had been exposed to NBCP; community leaders were also more likely to have spoken out around HIV-related issues here than in comparison districts. We documented positive changes over time in knowledge, attitudes and behaviours across all districts.

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MOPE0660 AIDS and the mainstream media: one NGO’s innovation

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1Jamaica AIDS Support for Life, St Andrew, Jamaica, 2University of the West Indies, Mona, Radio Education Unit, St Andrew, Jamaica

Background: Since its inception, distributed locally to three radio stations with a combined listenership 300,000 persons per show. Distributed to 14 radio stations in the Caribbean Region. Uploaded to three websites.

Way forward:

Make programme more adolescent friendly and attractive

Aim for Prime time airing

Uploaded to three websites

Makes a local, regional and International Perspective

Results: Since its inception, distributed locally to three radio stations with a combined listenership 300,000 persons per show. Distributed to 14 radio stations in the Caribbean Region. Uploaded to three websites.

Way forward:

Make programme more adolescent friendly and attractive

Aim for Prime time airing

Aim for the TV version of “Life’s Voices”

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M0PE0661
Receptivity and barriers to HIV testing among women of color in rural settings
J. Salazar, P. Gamache, B. Hudzik
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Background: As part of an initiative to supporting networks of HIV primary care and community health settings. HealthHIV provides intensive capacity build- ing to organizations to develop, expand, or enhance comprehensive primary medical and mental health services for people living with HIV who are under- served, minority populations in high HIV prevalence areas. There is a critical need to address increasing HIV infection particularly among African American (AA) women in rural settings. HealthHIV conducted research on the accept- ability of routine HIV testing recommendations to AA women in rural settings where AA constitute 53 percent of people living with AIDS and 30% of AA women ages 18-64 have never been tested for HIV.

Methods: Thirty nine community-based interviews and six focus groups were conducted using AA peer interviewers. Participants included 11 AA men between the ages of 25-45 as individual respondents and 35 AA women aged 20 as focus group participants.

Results: Overwhelmingly, respondents were enthusiastic and willing to accept a routine HIV test suggested by their provider if it was clear that it was part of a facility-wide routinization strategy. They also enthusiastically supported rapid HIV testing over conventional HIV testing. Many women respondents identified a critical need for more information about HIV and HIV testing. Almost all respondents agreed with an expanded age range for HIV screening, and many suggested that HIV screening should begin earlier than age 13.

Conclusions: This research provides implications for resource-constrained settings with a demographic density of AA women disproportionately infected and affected by HIV. Steps to increase HIV screening include: 1) developing culturally sensitive messages for clinicians to explain HIV testing to AA women, 2) working closely with providers to overcome barriers to talking to AA women about HIV and risk behaviors, and 3) expanding rapid testing.

M0PE0662
Teacher unions and AIDS workplace policy to address seropositive teacher’s and HIV affected teacher’s stigmatization in Senegal
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Issues: Despite a low HIV prevalence and a robust national response to AIDS in Senegal, stigma and discrimination remains high. Furthermore, even with a large and strong union presence, teachers have faced severe challenges, even with self-stigma and social isolation for either HIV infected or HIV af- fected teachers.

Description: In 2008-2009, a small group of HIV infected and affected teachers was supported by the Senegalese Committee of Education of Union against AIDS (COSSEL), UNESCO-BREDA and Education International, conducted in 12 of the 14 regions a pioneering national study on HIV+ teach- ers.

74 teachers (including 10 women) were interviewed and outlined high levels of self-stigma and discrimination with little to no workplace support. These findings with the financial and technical support provided by COSSEL and BREDA resulted in the creation of an association to support HIV infected and affected teachers. (CARVEE) in November 2009. CARVEE includes 24 members (including 5 women) as stated in Dakar and Breda. CARVEE has established a partnership with the Education Ministry and has been successful in affirmative policies as they provide increasing opportunities for teachers in the Education sector workplace policy.

The role of Education itself has supported discriminated teachers to get back to the workplace by identifying more suitable environments.

Lessons learned: Affirmative action for HIV infected and affected teachers in Senegal is facilitated by COSSEL in Educational field through anti-stigma actions. CARVEE’s members have benefitted from anti-self stigma training. CARVEE will receive from BREDA and COSSEL / Education Inte- rnational more financial and technical assistance with the needed support (advocacy, HIV training of trainers) using the book “Knowing to win: Life and teaching while responding to AIDS”. Presenting author email: mrmbengue@yahoo.fr

M0PE0663
The impact of social events to the LGBT community in HIV/AIDS prevention in Jamaica
P. Morrison
The Muse Group/Red Door Events, St. Andrew, Jamaica

Issues: The Ministry of Health in Jamaica posits that approximately one in three of the men who have sex with men (MSM) community, are infected with the HIV virus. To combat this, the Ministry will have to come up with a comprehensive campaign targeted towards the MSM Community. They have identified in several challenges facing MSMs.
1. It’s virtually impossible to get the MSM Community to congregate in one place.
2. Bareback as well as transactional sex is on the rise within the MSM com- munities
3. Jamaica is considered a class segregated society, and as such, the LGBT represents a subset of the wider society. Because of such, the LGBT group, 2-FLAG is not considered representative of the entire gay community.

Description: In June 2009, the Red Door Events were conceptualized to pro- vide a comfortable and safe setting for the LGBT Community (which includes MSMs). It was dubbed by its principals to host “Events with a Purpose”. As part of their mandate, they have had Peer Counsellors/Educators from the Ministry of Health present for distribution of literature related to Homophobia/ AIDS and STIs

Lessons learned: It provides a setting for the discussion of HIV/AIDS and distribution of literature in a previously underserved, yet large community in Jamaica. The Ministry of Health and other civil society organizations should get some primary data from across the varying demographics of not only the MSM communities, but also the other LGBT community also.

Next steps: Possible next steps for implementation, or recommendations. The Red Door concept is being refined to include further the communica- tion of HIV/AIDS to the MSM communities with an emphasis to develop social and new media networks within Jamaica and the rest of the Caribbean.

M0PE0664
Lesotho male clergy knowledge, attitudes and practices survey on HIV/AIDS
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Background: Clergy assessment of the knowledge, attitudes and practices about HIV/AIDS who are the leaders of the communities representing the entire country of the Kingdom of Lesotho.

Method: Forty male clergy representing most faith based groups in 10 dis- tricts in Lesotho gathered for the first time for a 3 day conference and pre- development session.

The clergy participated in closed door candid talks, seminars on Faith and HIV Response, Project /Resource Management, Data Collection and Small Projects. Intervention male prevention projects were written by the clergy for each district and presented to the group. Before the conference officially started the clergy were asked to complete a Knowledge, Attitude and Practice survey on HIV/AIDS.

The results: The clergy’s education level was very high with masters or doc- torates. Clergy knowledge of sexual and reproductive health was extremely high, 95%. The challenges are 82% think there is a “high degree of denial, fatalism and mysticism about HIV/AIDS. Ninety percent believe that young people are having sex earlier and the church should discuss sexual relationship matters, as 93% have lost church mem- bers to AIDS. Still only 73% clergy discuss HIV/AIDS with children. It is only 16% do so often and 13% very often. Moreover, 95%-97% of all clergy have experienced with their communities STD, HIV/AIDS, abortion, early pregnancy MTCT, teen pregnancy, family planning/contraceptives, unwanted pregnancies, and forced sex, while 88% second virginity. Clergy believe that the church encourages discussion on issues of family planning and contracep- tives 55%, HIV 75%, Abortion 44%, Unwanted pregnancies 58% and early marriages 63%.

Conclusion: Lesotho Clergy have a high level of knowledge about HIV/AIDS. Direct discussions about sexual health issues with their community is affected by culture, stigma, and the lack of direct support from the church. Presenting author email: drarielking@yahoo.com

M0PE0665
Protecting the rights of children and women to property and inheritance in Mozambique: elements for an effective intervention strategy
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Background: The AIDS epidemic has left many children orphaned at a young age, making them more vulnerable to property grabbing by relatives. In 2005-2006 Save the Children conducted a study in Mozambique aimed at understanding the nature and scale of this problem and the effects of disinherit- ance on children and women. A follow-up study, published in 2009, seeks to identify possible entry points for interventions and key messages for an effective strategy to protect inheritance rights.

Methods: Fieldwork was conducted in 4 provinces with the objective of iden- tifying traditional norms, values and customs that affect children and women’s rights to property and inheritance, especially positive norms and practices that can be reinforced to enhance protection of widows and orphans. Qualita- tive, quantitative and participatory approaches were used to collect informa- tion from children, widows, traditional healers, religious leaders, community judges and government, UN agencies and civil society.

Results: Traditional kinship structures, particularly religious beliefs, witch- craft and the perception that property grabbing is a family matter, not a public matter, all affect inheritance rights. Often, adults do not see the need to account for their assets, as representatives of the deceased or in a specific area. There are gaps in property and inheritance rights within local systems of conflict resolution and the public sphere.

Conclusions: Urgent need to look beyond legal arguments and develop more culturally appropriate communication strategies at community level to pro- mote behaviour change. This study identifies key messages and proposes participatory and creative methodologies to get them across. Entry points for
MOPE0666
The film “Life aspiration”
T.V. Pho, T.N. Tran

Sticks HIV/AIDS Prevention Center (SHAPC), Hanoi, Viet Nam

The film funded by PEPFAR and implemented by SHAPC.

Issues: Public communication means seem to provide most information on HIV prevention, as a survey conducted by SHAPC reveals. As a result, SHAPC implemented the Project “Advocacy to reduce stigma and strengthening knowledge about HIV prevention” with the film “Life aspiration”

* Raising awareness of community on:
  Rights of PLHIV
  Reducing stigma toward PLHIV
  Advocating PEPFAR care service in Vietnam

Description: Beneficiaries: PLHIV and the community

Content of the film

* Sympathetic attitudes toward PLHIV
  * Consequences of high-risk activities
  * Rights of PLHIV
  * Influence of stigma and discrimination on PLHIV
  * Effect of mother-to-child prevention program, ARV drug treatment program
  * Role of home-based care providers

Activities:
- The film is based on an actual short story about PLHIV
  - Advocacy of HIV stigma and discrimination reduction and strengthening of HIV prevention are integrated into the story and dialogues of the film
  - Producing and revising film
  - Broadcasting the film on VTC1 channel
  - Copying film to DVD and sending to other NGOs

Lessons learned: The film really attracted the audience and was broadcasted once. It is planned to rebroadcast 2-3 times based on audience request.

* “Life aspiration” – a film conveying a humanitarian message – attracted the audience because it is based on true stories of PLHIV in Hanoi. Besides, it is easier for the audience to remember the communication messages through the film dialogue and conversation.

Next steps: SHAPC will send DVDs to the television stations throughout the country for broadcasting. Therefore, audience will understand the communication messages and PEPFAR care services. DVD with English subtitle will be sent to international organization as well.

MOPE0667
Awareness on gender rights and domestic violence further empowers youth and sex workers HIV/AIDS peer educators in Karnataka, India
M. Bhagavandas, M. Kamnani

Citizens Alliance for Rural Development and Training Society, Bangalore, India

Issues: Women and youth are acknowledged worldwide as vulnerable to HIV. Women’s vulnerabilities stem from biological and socio-cultural factors, including violence against women, while youth are vulnerable mainly due to sexual transmission. In India, Government programmes exist to address the vulnerabilities of young people reporting decreasing age of sexual debut, however, implementation is weak.

Description: In 2009, BREAKTHROUGH partnered with CARDS (Citizens Alliance for Rural Development & Training Society) as the Lead NGO in Karnataka to address the issue of lack of gender education amongst young people and women, especially sex workers. The strategy was to build capacities of existing Peer educators in both populations, on risk and vulnerabilities from a rights-based viewpoint. Topics covered included human rights, difference between sex and gender, sexuality education, gender roles, condom use, violence against women and gender issues including vulnerability of women to HIV/AIDS. The film funded by PEPFAR and implemented by SHAPC.

Lessons learned: Results showed increasing disclosures by women of sexual harassment, girls feeling empowered to fight for their rights, young boys assisting in domestic chores, formation of youth groups to spread gender awareness and fight violence against women through programmes in schools and colleges. However lack of advocacy and sensitisation of key decision makers in rural India, such as Gram Panchayats, was a weak link, which if strengthened would positively impact the programme outcome.

Next steps: To increase effectiveness of HIV prevention programmes, the education of families and communities is crucial. The film will be used to sensitise the Government’s existing HIV response.

MOPE0670
Construcive involvement of police as partners in the fight against HIV/AIDS and gender-based violence
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EngenderHealth, Johnnnesburg, South Africa

Issues: Since 1998 EngenderHealth has used the Men as Partners® (MAP) strategy since 1998 to transform harmful gender norms rooted in the socialization of men and women in a patriarchal society. The MAP strategy, views men as clients, supportive partners and change agents in their communities, not as perpetrators that they are often perceived to be. It also recognizes the role of gender socialization on their attitudes and behaviors, and that transformation is inevitable in most situations. EHSA reaches men and boys with male-friendly transformation workshops, focus group discussions, HIV counseling & testing, mass media and other campaigns to provide information and challenge attitudes and harmful gender norms.

Lessons learned: To date, the strategy has been used by eight government departments, eight multilateral bodies, ten tertiary institutions and several Community-based and Non-Governmental organizations in 6 provinces. Findings from workshop evaluations, in-depth interviews and digital stories from recipients indicate a change in gender attitudes and reported behaviors to adopt more gender equitable and healthy norms.

Next steps: Transformation is a long-term and continuous process that requires ongoing assurance and a supportive environment. There is no doubt about the increasing importance and interest in constructive male involve ment initiatives that promote gender equality and healthy relationships between men and women. All endeavors that involve men in the reduction of violence against women and gender-based violence should positively impact the programme outcome.

Next steps: Transformation is a long-term and continuous process that requires ongoing assurance and a supportive environment. There is no doubt about the increasing importance and interest in constructive male involvement initiatives that promote gender equality and healthy relationships between men and women. All endeavors that involve men in the reduction of violence against women and gender-based violence should positively impact the programme outcome.

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MOPE0668
Using edutainment and special events for STI/HIV prevention amongst young people in Nigeria–delta region of Nigeria
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Background: Young people 10 - 24 years comprise 37 % of our nation’s population, an estimated 8000 young peoples 15 - 24 become infected with HIV everyday. Socio cultural norms, such as traditionally equitable gender roles, dire poverty increases the risk to STI for young people especially girls. Many youth do not have access to formal education, which is crucial to supporting healthy sexual behaviors. The nexus of sex, sexuality, HIV, and young people often leads to moral debates based on fear, judgments or denial of young people’s sexuality. Weak institutional organizational capacities has resulted to slow implementation of intervention programmes along priority lines.

Methods: The intervention employed the use of edutainment by celebrating St. Valentine’s Day -- Love Talk Show/STI Education Dialogue, Counseling and Exhibition Day; tagged “Express Love & Stay Alive” Preparatory activities included; Breakfast Meeting with key youth stakeholders and front-line FBOS leaders, Community Mobilization Railes, Media consultative dialogue and follow up advocacy.

Results: 1200 youths attend the event, 758 signed up the delay in sexual debut commitment and abstinence forms. The young people requested counseling services with an upward of 30% increase in callers to our STI/HIV/AIDS hotlines. 50 young people were recruited and trained as Community Influencers and Agents of change through Peer Education on Reproductive Health; STI/HIV & AIDS including Life Building Skills this led to the formation of a community based Abstinence Forum.

Conclusions: Meaningful participation and involvement of young people in Reproductive Health services promotion and protection, and gender mainstreaming in edutainment, community and social mobilization will contribute to a decline in the current burden of HIV/AIDS in Nigeria. The need to consistently provide the needed leverages in terms of technical resources and funding will accelerate opportunities for services delivery for young people at the community level.

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MPOE0671 Universal access to interpersonal communication for HIV prevention: a realistic goal? Lessons on feasibility from Zimbabwe

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ISSUES: Interpersonal communication (IPC) is a critical element of both behavioural transmission of HIV, also because mass media interventions have limitations in engaging audiences around processes of changing community norms. A limitation of interpersonal communication interventions is that they are commonly implemented at a small scale, frequently in the context of pilot projects, and at a cost that would not be sustainable in regular community processes. This poses a challenge in high HIV prevalence countries like Zimbabwe, in which interpersonal communication is considered an important element of the prevention package.

DESCRIPTION: The Zimbabwe National AIDS Council set the target to provide interpersonal communication on key drivers of the epidemic such as multiple and concurrent partnerships national-wide between 2006-2010. The minimum package for a district and ward was designed in a way that it could be replicated nation-wide within a realistic horizon of time and funding. The minimum package includes participatory action planning, training of key leaders and interpersonal communication through trained community facilitators. Community meetings are conducted in smaller groups in combination with leader training meetings. One facilitator is allocated an adult population (15-49) of 500 persons to be reached. Within 18 months it was feasible to scale up this approach to 26 out of 62 districts of the country through 3,900 community facilitators.

LESSONS LEARNED: With a total of 4.5 million person exposures reported by community facilitators in 2009, the cost of implementing the programme is less than 1 USD per capita per year. This translates to at least two exposures for every person in this specific population of 1.8 million people.

NEXT STEPS: At this cost, it is therefore possible to scale up IPC to universal access in all the districts in Zimbabwe, a process that will start in 2010.

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MPOE0672 Multiple dimensions of stigma and implications for HIV/AIDS interventions targeting black men who have sex with men

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ISSUES: Epidemiological data show staggering rates of new HIV infections among Black men who have sex with men (BMSM) in the United States (U.S.) and a high disease burden in this population. Interventions targeted toward BMSM are greatly needed in order to effectively combat the epidemic. However, stigma based in HIV/AIDS, sexuality, and gender roles thwart the reach and effectiveness of interventions and must be combated in order to see reductions in HIV incidence among BMSM.

DESCRIPTION: The National Alliance of State & Territorial AIDS Directors (NAS-TAD) conducted interviews with key stakeholders (health department staff, community leaders, and HIV/AIDS prevention practitioners) in order to document intervention activities directed toward BMSM. Seventy-one individual and small group interviews were conducted with participants in ten high HIV incidence communities across the U.S.

LESSONS LEARNED: Stigma directed toward gay and bisexual Black men, HIV-positive status, and criminalization are key barriers in implementing successful prevention strategies. These three types of stigma were observed both among BMSM and within the Black communities of which men are a part. Additionally, smaller and large-scale community interventions are needed to highlight diversity that exists among BMSM and lower levels of stigma, in order to identify HIV-positive BMSM, as well as those who do not conform to masculine gender role norms. Creating a social context in which the diverse groups of BMSM are accepted and included as part of the larger Black community is crucial to reducing HIV in this population.

NEXT STEPS: Practitioners should draw upon existing social marketing campaigns and develop new intervention strategies in order to increase the Black community’s acceptance of BMSM. HIV-positive BMSM and local health department can spearhead strategies involving the use of media and culturally-appropriate messaging. HIV-positive BMSM should highlight and normalize the presence of BMSM in communities across the U.S.

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MPOE0673 Media as a tool for increased TB/HIV advocacy and service uptake

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BACKGROUND: To stimulate and promote informed media reporting of Tuberculosis and HIV/AIDS in the print and electronic media in Nigeria and correct myths and misconceptions that fuel stigmatisation of PLWH and those affected by TB. Journalists Against AIDS (JAADS) Nigeria organized a series of media trainings on TB/HIV in collaboration with the National TB Control Programme.

METHODS: Prior to the training a desk review and content analysis of Print Media reporting on TB/HIV was conducted by JAADS, which provided content for the issues to be discussed at the training. Twelve Newspapers (12) and four (4) magazines with national spread/circulation were monitored. The survey focused on editorials, opinion articles, news stories, feature reports, letters and adverts. Pre and post workshop evaluation forms were also distributed at the beginning of the training to assess participant’s knowledge before and after the training as well as suggestions for scaling up and improving content.

RESULTS: Separate training workshops held for journalists drawn from print and electronic media from the Northern and Southern parts of the country. The training included interactive sessions that provided policy and practice information regarding TB/HIV control in Nigeria. Training also included sessions anchored by former TB patients and persons with TB/HIV. Site visits to TB/HIV diagnostic and treatment centers and TB/HIV story writing workshops for journalists were conducted.

CONCLUSIONS: TB/HIV training programmes for the media need to take cognizance of unreported areas and identify practical and innovative approaches to ensure that TB/HIV is kept in the news.

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MPOE0674 Effective community-based HIV prevention behaviour change strategy in 26 districts: experiences from Zimbabwe

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ISSUES: Based on comprehensive situation and response analysis (2005), a national behaviour change strategy was developed under the overall leadership of the National AIDS Council. In Zimbabwe, HIV is highly transmitted through sexual contact and 4 in 5 infections due to sexual transmission. Zimbabwe is experiencing a generalized epidemic; hence promoting safe sexual behaviors is central to HIV prevention in all communities. Concurrent and multiple sexual partnerships have been identified as key drivers of the epidemic. The programme focus is increasing risk perception of these partnerships and addressing their underlying social norms.

DESCRIPTION: The community-level implementation follows a step by step approach including: sensitization and advocacy with district and community leadership; participatory district-level assessments; participatory action planning; participatory community training; involvement of custodians of culture as advocates for behaviour change; outreach work by trained Behaviour Change Facilitators; community screening of films; group talks and community meetings; distribution of evidence-based BC materials; radio-programme on behaviour change and relationship skills in vernacular languages; community-based male and female condom promotion and strict monitoring for programme quality.

LESSONS LEARNED: A review (2009) described the programme as well grounded in Zimbabwe’s epidemiology, culturally appropriate and impactful. Community reports describe remarkable effects on openness about HIV, increasing involvement of leaders and increased uptake of testing and counselling. The qualitative research found considerable effects on individual reflection and positive changes on sexual practices, gender norms, traditional practices and community communication in intimate relationships. Comparison of 2006 and 2009 ANC data suggests that HIV prevalence in women 15-24 declined by 24 % from 14.6 % to 11.1 % in 8 sites within the behaviour change districts. Further analysis would be required to compare the decline in prevalence in programme and non programme districts. Expansion to 34 new districts envisaged in the programme for universal access to prevention.

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School-based sexuality education, life skills education
MOPE0675
HIV/AIDS affects us too: scaling up HIV prevention for adolescents with hearing impairment and young people in Lagos
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Issues: The recent demographic census in Nigeria shows that averagely one in every five young people has one form of disability. Studies indicate that there is a growing incidence of HIV infection as well as sexual health problems among this specific population. This stem largely to misconception of stakeholders on their vulnerability and perceived hapless situation about their physical status. Peer to peer programmes remains one of the most acceptable strategies to the prevention of HIV among young people. In Lagos, Nigeria, peer education varies as evidence of an effective package is one that lead to behaviour change and vulnerability reduction among the heitly impaired youth.

Description: HIV Affects Us II is a conceptualized life skill, peer to peer program that was designed to educate youth with disabilities faces to HIV & AIDS, sexual health issues and high risk behaviours. The programme involved 5 special schools and clubs, promoting HIV prevention through youth-friendly peer education and skill building sessions, training workshops and interactive sessions.20 youth friendly liaisons have been trained, 200 hearing impaired students in 5 special clubs and 3 peer educators in the schools, election of programme ambassadors combining it with video-casts, assembly talks, advocacy walks, jam sessions, dramas, debates, and role plays.

Lessons learned: It should however be noted that the bureaucratic natures of state education boards are rigid in the educational contents towards hearing impaired youth. The students were able to show their innovativeness in reaching their peers with activities that are appealing. Meeting with the school administrators and community help gave us a situation analysis of the students.

Next Steps: The programme is a viable sustainable programme as it offered the young people and adults with the interest of being advocates in HIV prevention as it was moving towards more funding is required to have replica models in other parts of the Lagos and the country.

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MOPE0676
The importance of educational programs about AIDS topics for academic students
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Background: Iran has recorded at least 3,409 deaths from AIDS, 2,097 males and 1,312 females. More than 50% of new cases of HIV in Iran are adolescents. In Iran, high risk behaviors such as drugs abuse and multiple partners are frequently observed in these age groups. Hence, promotion of adolescents’ knowledge and attitude regarding the prevention of HIV/AIDS is very crucial in reduction of its incidence. Peer education is considered as one of the most effective educational methods in order to increase knowledge and attitude of a target population. The purpose of the present study is to determine the efficacy of peer education on knowledge and attitude of high school students toward HIV/AIDS in Shiraz.

Material and Methods: In this intervention case - control study which was conducted from April to September 2008, 1088 participants (576 males & 512 females) were recruited using cluster random sampling. According to 4 groups design of salmon, subjects were divided randomly to four groups (in each group 272 male & female). A standard questionnaire was designed and knowledge and attitude of students were assessed as a pretest. Post test evaluation was performed after 4 months period of education by educated peers for the two case groups.

Finding: After 4 months of peer education, the level of knowledge and attitude of participants in case groups (16.47±3.73) was remarkably higher compared to control groups (13.66±3.92) (P< 0.05) highlighting the efficacy of the performed education. Categorization of scores based on participants’ sex revealed that school girls tended to score significantly higher in both pretest and post test than boys with P< 0.05 and P< 0.01 respectively.

Discussion: The results indicate that peer education is very effective in promotion of knowledge and attitude of high school students about HIV/AIDS. Therefore implementation of this method is strongly recommended at provincial level in order to increase awareness of youth and reduce the incidence of HIV in this age group.

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MOPE0677
Effect of brief advocacy intervention on the understanding of AIDS among 10th class students in rural India
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Background: Many rural India students in India still have limited access to the new-age communication means and live in conservative settings. The levels of understanding of AIDS among 10th class students in rural India are often clouded with myths and partial information. India has nearly 5 million HIV/AIDS patients with a large number coming from rural India.

Methods: A short questionnaire was designed to gauge the basic level of knowledge of the 10th class students studying in rural areas of Haryana, India about HIV-AIDS. Two short presentations of 1 hour duration each were also prepared as an intervention tool after the questionnaire. Students were made to fill the questionnaire twice, once immediately before the intervention and then after one week of the intervention. Difference in the scores obtained were analysed to understand the increase in level of understanding after a low-cost short intervention.

Results: A finding that even a short intervention and interactive learning session of just two hours can increase the understanding level of the students by an average of 32 percent. The increased awareness and sensitisation also suggests possible behavioural modification helpful in the ABC approach for implementation of policies strategically so as to successfully counter HIV- AIDS.

Conclusions: The short interventions are very cost effective means of increasing awareness and understanding of young adolescents about HIV-AIDS. A short intervention in a rural setting of India for around 100 youths costs less than 17 USD. Such a small investment can increase the understanding level by nearly 30 percent. In conservative settings where discussions about sex are a taboo, this is a good method of achieving results.

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MOPE0678
The effect of peer education on knowledge and attitude of high school students about HIV/AIDS - Shiraz South Iran 2008
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Background: More than 50% of new cases of HIV in Iran are adolescents. Many rural India students in India still have limited access to the new-age communication means and live in conservative settings. The levels of understanding of AIDS among 10th class students in rural India are often clouded with myths and partial information. India has nearly 5 million HIV/AIDS patients with a large number coming from rural India.

Methods: In a descriptive cross- sectional study, 480 undergraduate students were selected by stratified cluster sampling, to answer a questionnaire with 30 question about AIDS topics in 2008. After educational program, study was repeated with 420 students. Results were analyzed by SPSS software version 13.

Results: Among students, 260 graduated from the GRS program 2-5 years pre-survey, 320 were from the control group, which was comprised of students with a large number coming from rural India. It was found that even a short intervention and interactive learning session of just two hours can increase the understanding level of the students by an average of 32 percent. The increased awareness and sensitisation also suggests possible behavioural modification helpful in the ABC approach for implementation of policies strategically so as to successfully counter HIV- AIDS.

Conclusions: The short interventions are very cost effective means of increasing awareness and understanding of young adolescents about HIV-AIDS. A short intervention in a rural setting of India for around 100 youths costs less than 17 USD. Such a small investment can increase the understanding level by nearly 30 percent. In conservative settings where discussions about sex are a taboo, this is a good method of achieving results.

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MOPE0679
Long-term behavioral impact of a soccer-themed, school-based HIV prevention program in Zimbabwe and Botswana
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Background: This study represents the first long-term evaluation of a school-based intervention designed by Grassroot Soccer (GRS) and delivered by professional soccer players in Bulawayo, Zimbabwe and Gaborone, Botswana. Since 2003, more than 300,000 youth have graduated from programs based on GRS’ interactive curriculum, which uses soccer language, activities, and metaphors to educate youth about HIV prevention and life skills.

Methods: In Bulawayo and Gaborone, students aged 15 to 19 (n=553) completed confidential, self-administered questionnaires assessing HIV-related knowledge, attitudes, communication, perceived norms and behaviors. Of the participants, 260 graduated from the GRS program 2-5 years pre-survey, while 293 comprised a comparison group of same-grade peers who had not participated. Bivariate data were analyzed using logistic regression analyses; continuous data were analyzed using ANOVA. Education level was categorized by age, gender, and country.

Results: Compared with non-graduates, graduates were more willing to care for a family member with HIV (adjusted OR=1.8, CI=1.1-2.8) but less likely to have tested for HIV (adjusted OR=0.4, CI=0.2-0.8). Forty-four graduates (17%) and 54 non-graduates (18%) had had sex (adjusted OR=0.6, CI=0.5-1.3). Sexually active graduates had fewer sexual partners (adjusted OR=0.2, CI=0.1-0.5) and fewer partners in the past two months (adjusted OR=0.8, CI=0.5-1.3). There were no statistically significant differences in knowledge, communication, perceived norms, or behaviors.
Conclusions: Subgroup analyses were limited by small sample size, especially those restricted to sexually active youth. Preliminary observations suggest that the program in Zimbabwe may be more effective than the program in Botswana. Evidence of effectiveness in reducing the number of sexual partner changes was promising. Given the high percentage of young people in Southern Africa with multiple partners, this model should be considered by Ministries of Education but also adapted to better promote HIV testing, abstinence, and HIV-related communication. Further evaluation should include baseline assessment, a larger sample and, where possible, health outcomes.

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MOPE0680

Pre-service teacher training in Vietnam: HIV education needs and opportunities

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Background: Effective HIV education relies on teachers who are knowledgeable and comfortable with technical content and skills-based teaching methods. Pre-service teacher training is a critical component of large-scale and sustainable education initiatives. This study aims to assess the needs and opportunities for pre-service teacher training in HIV education in Vietnam.

Methods: The study used three methods to collect data: a desk review of national and university curricula frames, qualitative data collection from 35 semi-structured interviews with 9 group discussions with pre-service teachers, university leaders and Ministry officials analyzed with NVIVO and a survey of 826 pre-service teachers. Quantitative data were analyzed by SPSS.

Results: Pre-service teachers knew little about basic reproductive health (RH) and HIV information and could recognize misconceptions (over 90%). They lacked basic knowledge about sexual content such as sexual orientation, abortion and condom use. Nearly all (92%) pre-service teachers supported learning about RH and HIV although 48% felt that they needed the information and skills before trying to teach students; 60% wanted this information and skills for their own health. One-third of the sample held inequitable and harmful gender attitudes and stigmatizing attitudes toward PLHIV. Qualitative data suggested that pre-service teachers feel a responsibility to model traditional values, especially toward sex. Opportunities to add HIV education to pre-service teaching colleges and universities pointed toward elective and extra-curricular courses and activities, rather than compulsory courses.

Conclusion: Pre-service teachers demonstrated basic knowledge and positive attitudes toward teaching RH and HIV & AIDS. Methods and practice to teach interactive, student-centered skills-based education are needed. In addition, time and space are needed for pre-service teachers to gain comfort and confidence to speak about the topics and to reflect on and challenge strong traditional attitudes toward sex and gender norms.

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MOPE0681

Empowering students as prevention brokers: inscribing HIV/AIDS in secondary education in Germany

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Issues: Although most German schools have a widely read school newspaper, this is often neglected as a source of support in youth prevention projects. School journalists help form opinion and influence social norms and could therefore contribute to reducing risk-behavior and creating a climate of solidarity and tolerance. Social similarities among the peer groups served by the papers ensure that language and information is both appropriate and disseminated relevant to target groups. That’s why, in Fall 2009 as part of the national conference “HIV in Dialogue”, the Berliner Aids-Hilfe (Berlin AIDS Association) peer education project “Schoolwork” invited school journalists to a workshop.

Description: The first part of the workshop provided information not sent to the participants beforehand (epidemiology, prevention and the peer education approach). This helped student journalists decide on their topics. In the second part, partners from various HIV groups (e.g. the Federal Center for Health Education and PHLV-Community) were available for interviews; student journalists were to use those other participants or visit schools. In the third part, the student journalists wrote their articles; the Schoolwork Team was available to assist if required. The finished articles were published in the school newspaper, which was distributed to all other participants or visit schools.

Lessons learned: The high quality of the articles, the wide range of topics covered, and the large number of readers reached demonstrate the importance of including young journalists in prevention activities. The conference setting proved particularly useful, as it allowed exchanges between youth, community, and professional groups.

Next steps: Existing contacts with young journalists must be maintained and interesting topics newly established. We decided to like see the workshop established as part of the “HIV in Dialogue” conference.

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MOPE0682

Facilitators and barriers to implementing HIV/AIDS education in Bangladesh

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Background: School-based education programs are an effective mechanism for providing HIV/AIDS education in Bangladesh. This program encompasses two elements: curriculum development and teacher training. However, even when interventions are well designed, factors at the individual, school, and community levels have been found to affect implementation.

Methods: An HIV curriculum was developed by PIACT (a national NGO) and incorporated it with national curriculum since 2007. Based on the curriculum, the subject teachers who teach general science and social science subjects in schools were trained. A cross-sectional study was conducted among the subject teachers in randomly selected schools in the districts clustering control and intervention groups based on the teachers training exposure. A total of 705 teachers were interviewed with 332 in intervention and 372 in control area. Data were collected through self-administrative surveys and analyzed using SPSS, version 11.5.

Results: Teachers in the intervention area were almost twice as likely to have taught HIV in the classroom compared to those in the control area (84.7% vs. 41.2%). Trained teachers were less likely to face difficulties in teaching about HIV and more likely to use interactive methods in the HIV classes. Almost 50% teachers reported that they had less than the allocated time to teach the content. Almost 40% teachers did not received teaching guide, which was effective in helping teachers to create a comfortable environment for talking about sexual relationships.

Conclusions: The teacher training has a positive effect on implementing the curriculum. Most pre-service teacher training in the classroom were quite practical, for example, that the time for teaching was not adequate and the teachers did not had been received by all teachers. The results highlight the need to continue efforts to train teachers but to provide additional support to teachers.

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MOPE0683

Changing sexual behaviour through self-efficacy: evidence from star for life - a life skills programme in KwaZulu-Natal, South Africa

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Issues: Star for Life is a life skills programme among grade 8-12 learners in 40 rural-based high schools in northern KwaZulu-Natal, a province in Southern Africa. With a programme model informed by the Social Cognitive Model, it aims at inspiring learners to formulate their dreams for a better life and strengthens their self esteem in order to realize those dreams. The paper analyses whether the programme has empowered learners to choose challenges that reduce their risk of contracting HIV

Description: Using systematic random sampling, a sample of 2411 learners responded anonymously to a questionnaire. Responses from intervention schools (N=2000) were compared with a control group (N=411). The hypothesis was that learners in intervention schools would have more positive values on six outcome variables: attitudes to life and education, school performance HIV literacy and safer health and sexual behaviours. Statistical tests were conducted to describe and test the reliability of the variation across the outcome variables. Multivariate regression analyses, controlling for alternative explanations, tested whether the intervention had high levels of formation were statistically significant predictors of desirable outcomes.

Lessons learned: The hypothesis was confirmed and the programme had reduced the likelihood of negative self and sexual behaviours in those learners. The results were particularly strong among adolescent girls where the intervention and high self esteem were the strongest predictors (significant at 95% level) of condom use at last sex, abstinence from penetrative sex, and pregnancy. Whereas 40% of the young women in the control group had at some stage been pregnant, this figure dropped to 27% in the intervention schools and to 13% among girls in the interventions schools who had high self esteem.

Next steps: At a cost of about USD25 per year per learner, the Star for Life programme is a cost-effective school-based way of reducing the risk for adolescent girls of contracting HIV in hyper-endemic countries.

MOPE0684

Peer education: an effective way to learn about HIV/AIDS among young people in Romania

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Issues: Romania has a high number of HIV/AIDS infection cases among young people. From the total number of 9,669 PWHA in 2009, 36.39% are adolescents (age 15-19). Moreover a study published in 2004 shows that the number of people who know ‘comprehensive correct knowledge” about HIV/AIDS is very low (9% men, 3% women). Condom use at the last sexual intercourse among the 15-24 age group was of 24.4% for women and 63.9% for men. HIV services for the young generations are lacking in Romania. They lack information and access to adapted prevention messages. These high numbers among young generations are threatening and need to be addressed.

Description: ARAS - Romanian Association Against-AIDS works with young people since 1992. The project aims at informing young people (15-16 years old), to motivate them to adopt safer behavior and

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to decrease discrimination against RWHAs. 10 young volunteers were trained and became health-educators. In one year they visited 5 high-schools and 3 orphanages in Buchar, achieving 1600 consultations on HIV/AIDS, STIs, discrimination, condom use, sexual and reproductive health, contraception, and in four activities reached 1200 young people through educational games, open discussions, forum-theatre etc.

Lessons learned: Young people going directly in the placements centers and in the classrooms, and offering fun and interesting ways to learn how to stay-safe is an effective method to surpass obstacles such as lack of time, shame and other barriers related to the information. The adolescent were very interested in the topics, they had a lot of questions and also they asked the educators for more information.

Next steps: The main aim is to continue the activities in high-schools and orphanages, to select and train more peer-educators. We will focus on implement a continuous evaluation among beneficiaries and expand the number of locations with more variety in the venues (parks, pubs).

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MOPE0685 Handbook of youth prevention - an instrument for quality assurance, networking and HIV prevention mainstreaming in Germany

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Issues: Although numerous actors are engaged in HIV prevention among German youth, there is no consensus on content or methods (Schoolwork), the voluntary youth prevention team of the Berliner AIDS-Hilfe (BAH), has professionalized its activities through ongoing education and training. In April 2009, after two years of discussion and development, it published a Handbook of Youth Prevention. Today, the prevention standards established in the handbook are in use in 1000 schools in Germany. The handbook is not only for the Schoolwork Team. The handbook must also be understood as a means to fulfill the function of connecting the various actors of the field of HIV/AIDS/STI prevention, while mainstreaming HIV prevention in new areas and regional organizations.

Description: The 166-page handbook includes detailed information on the extent of HIV/STIs, and blueprints for workshops. The interactive strategies suggested for specific contexts have been shown to be effective for daily in daily prevention activities. The handbook addresses diverse audiences, including youth leaders, parents, teachers, community service employees, and coordinators of organized sexual health projects. To ensure continuing validity, the handbook comes in a ring binder, which allows the addition of the updates, supplements, and ready-to-print methodological guidance that are available online.

Lessons learned: The Handbook has filled a gap in German youth HIV prevention. It promotes standards and creates a platform for exchanging effective and established methods, and strengthens the network in this field. As the schools reach numerous audiences, it facilitates mainstreaming of HIV prevention and broader access to HIV/STI-prevention discourses.

Next steps: Data collected on handbook consumers allows specific audiences to be appropriately targeted, demand evaluated, and new consumers identified. UNAIDS director, Michel Sidibé, proposes translating the handbook into Russian, English, and other languages. Funding and regional NGO distributors are being sought at the XIII International AIDS Conference.

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MOPE0686 Parent involvement in HIV education

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Issues: Parents in Vietnam value education and typically emphasize performance on exams over life skills-related education. Mention of sex and sexual-activity concerns parents even more for fear that it would 'show the way for the deer to run' or teach children to have sex. They can facilitate or hinder HIV prevention and broader access to HIV/STI-prevention discourses.

Description: The Vietnam Ministry of Education and Training is developing a national reproductive health and HIV education curriculum for secondary school students from grades 6 to 12. To support parental acceptance, Save the Children and a local partner consulted with 75 parents in three provinces school students from grades 6 to 12. To support parental acceptance, Save the Children and a local partner consulted with 75 parents in three provinces.

Lessons learned: Despite the differences of languages, knowledge, customs and ideologies between countries and experts of the region, the contents of the Ministerial Declaration and the scientific evidence that supports the document, were critical factors for the establishment of regional agreements and consensus for the definition of the contexts included in this glossary.

Next steps: Better HIV prevention education requires that we question our taken-for-granted constructions of empowerment and gender in educational discourses. This presentation aims to promote discussion around the spaces of teaching and learning.

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MOPE0687 Why isn’t HIV prevention education empowering?

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Issues: The call to “empower” young people to reduce the risk of HIV infec tion refers to a commitment to gender justice, empowerment and “empowerment” underpins educational responses to gender and HIV. At the same time, HIV prevention education has faced criticism of feminist critiques of empowerment discourse. To examine these educational responses to HIV, it is critical to examine the assumptions of empowerment discourse and ways that these assumptions may perhaps, rather than open up possibilities for, the agency of gendered subjects.

Description: This presentation will discuss findings from a discourse analysis of a “life orientation” student workbook used within schools in the Western Cape province of South Africa. It will focus on the construction of “choice” and discuss the implications for empowerment. Discourse analysis begins from a view that language is not neutral, and allows us to explore how a specific educational text creates meaning in relation to sexuality, risk and behavioral change. The analysis draws on feminist critiques of a simplistic empowerment discourse from both the public health and educational discourses. This presentation aims to promote discussion around the spaces of teaching and learning.

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Supporting comprehensive sex education through the development of regional technical tools for health workers and teachers: “Glossary of terms of comprehensive sex education, HIV and AIDS for Latin America and the Caribbean”

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Issues: Ministries of Health and Ministries of Education of Latin America and the Caribbean approved the Ministerial Declaration “Preventing through Education” on August 1st, 2008. This document establishes joint commitments for HIV prevention in children, adolescents and youth by the development of comprehensive sex education tools and the promotion of sexual and reproductive health. Countries involved in this initiative have recognized the need of the adoption of a common language that allows the comprehension of the more useful terms on comprehensive sex education, HIV and AIDS issues.

Description: The National Center for the Prevention and Control of HIV/AIDS of Mexico (CENSIDA), has developed in collaboration with Mexican and regional experts, a “Glossary of terms of comprehensive sex education, HIV and AIDS for LAC region”. Thirty nine regional experts were involved in the development of the glossary, of these, 19 accepted and were involved in the development process. Technical criteria of the glossary: commented, focused for health care workers and educators, synthesizes the experience in sex education and sexual and reproductive health in the last 20 years under the framework of the Declaration, based on scientific evidence, human rights, gender roles, non-discrimination, and a preventive approach. The glossary contains 101 terms, including a regional definition of “comprehensive sex education”.

Next steps: Share this glossary with Ministries of Health and Ministries of Education of LAC region. This tool may be used by for public health and educators in their daily activities with children, adolescents and youth population, looking for impact in the promotion of healthy life-styles.

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MOPE0689 A shift in focus: an evaluation of life skills HIV education for in- and out-of school youth informs Cambodia’s national HIV prevention response

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Background: Life Skills for HIV Education (LSHE) was introduced in 2005 as a means of contributing to the national HIV response in Cambodia. A pilot curriculum was introduced in and out of school youth, beginning in November 2005. The Ministry of Education, Youth and Sports (MoEYS), was reaching 48,913 young students in 521 primary schools and 9 in September 2009, an evaluation was conducted by the MOEYS on LSHE’s effectiveness within
Methods: The LSHE intervention was successful at improving comprehensive HIV, health (SH), knowledge and attitudes among children: 77.1% of the 6th graders from project schools, compared to 45% from non-project areas. This demonstrated comprehensive AIDS knowledge. Students in project schools also had significantly higher scores on knowledge of LSHE content, positive attitudes and familiarity with skills, such as refusal, delay and negotiation. Moreover, both boys and girls from the project districts were knowledgeable, communicative and confident about the skills they learned. Progress was less evident among out-of-school youth.

Conclusions: The school-based approaches were found useful, the LSHE strategy to reach-at-risk youth outside schools was not well designed. The evaluation therefore recommended using a different delivery mechanism to reach most-at-risk youth, with expanded NGO partnerships, to scale up coverage using a ‘hot spot’ approach. These programmes should comprehensively address the needs of young men and women who engage in high risk behaviour, particularly ensuring greater access to information, skills and services. A national survey of most-at-risk adolescents has been initiated by the MOEYS and partners to achieve this.

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MPOE0690
Knowledge and attitudes of students, parents and teachers on family life education (FLE) in schools in Mumbai

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Methods: A Life Skills Education Program was started in 1993 for 9th standard students in Mumbai. The program was banned in 2005 due to controversies regarding its contents. The program has, however, continued in some private schools. CCDT (write this out) carried out research to assess the effects of the program on students’ knowledge levels concerning sexual and reproductive matters, and to learn about the attitudes of parents and teachers concerning the program.

Results: Students who were exposed to the Family Life Education had better knowledge scores and more positive attitudes regarding physical changes during adolescence, sex and sexuality, HIV/AIDS and STI and sexual abuse. Also, 68% of teachers and 71% of the parents reported positive attitudes toward the program. Boys had considerably higher knowledge scores and better attitudes than the girls.

Conclusions: The data show that the family Life Education program has clear and positive outcomes for the students, and should be re-introduced in all the schools. The study also shows that most of the parents and teachers have positive attitudes regarding the FLE program. A structured FLE program can provide useful information and build coping skills, enabling the adolescents to make better decisions about sexual and reproductive matters. The weaker knowledge levels among girls suggest that special efforts should be made to strengthen the contents and impact of FLE, including additional training for the female teachers.

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MPOE0691
Which teachers talk about sex? Psycho-social determinants of educator engagement with high school learners on HIV/AIDS and sexual practices

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Issues: HIV prevention education in schools is pivotal to overcoming the HIV/AIDS epidemic in South Africa. Whilst many educators recognize this role, many are still unwilling to address issues relating to HIV/AIDS and sexuality with their learners. Despite educators’ reluctance to interact with learners about these issues, research continues to highlight the desire of learners to receive HIV prevention education through school-based programmes.

Description: As a result of the call for educators to provide HIV prevention and sex education to learners, this study sought to investigate those individual and psycho-social factors associated with high educator–learner interactions in relation to HIV/AIDS and sexual practices. 1074 educators from 34 Schools in two Districts within South Africa participated in this study. Schools were evenly distributed in urban and peri-urban areas.

Results: The study identified that younger educators and educators in lower job categories were more likely to report interactions with learners on issues relating to HIV/AIDS and sexual practices in comparison to their older colleagues. Furthermore, favourable perceptions of educator–learner interactions were associated with factors such as: a good level of HIV/AIDS knowledge, perceptions of FLE and HIV/AIDS, and low stigma toward people who have AIDS. Whilst there is self reported evidence of a high number of learner–educator interactions on issues related to HIV/AIDS and risk of the perceived lack of HIV/AIDS educational and training support for educators by the Department of Education. Compounding this is the relatively high degree of sexual risk behavior reported amongst younger educators as compared to their older counterparts, which undermines their credibility as HIV prevention educators.

Next steps: These findings amplify the call for formal training to be provided to educators and positive attitudes about HIV knowledge that are equated to adequately provide HIV education and sexual life skills training to the learners with whom they interact.

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MPOE0692
HIV/AIDS stigma attitudes among educators in KwaZulu-Natal, South Africa

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Background: One hundred and twenty educators from KwaZulu-Natal, South Africa, underwent HIV/AIDS training. The educators were surveyed about their attitudes toward people with HIV.

Methods: The educators completed self-administered survey questionnaires both before and after two interventions. Measurements included demographic characteristics, teachers’ knowledge about HIV/AIDS, self-efficacy in handling HIV/AIDS situations, and attitudes (stigma and otherwise) towards HIV-related issues.

Results: The overall stigma scale had a Cronbach alpha coefficient of 0.66. Educators in the workshop generally had lower baseline levels of stigma than in the control group. Following both interventions the stigma levels of both groups of educators were significantly reduced. Improvements in the general knowledge about HIV as a disease and in the specific knowledge about HIV transmission risks were both statistically significantly associated with reductions in stigma attitudes, having controlled for educators’ baseline stigma levels and demographic profiles.

Conclusions: The levels of teachers’ stigma attitudes were statistically significantly lower after both types of HIV/AIDS training and were also statistically significantly associated with improvements in HIV knowledge.

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MPOE0693
Misinformation on HIV prevention among Polish students and teachers - case study of Ponton Group of sex educators

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Issues: This study aims to provide an overview of misconceptions and gaps in knowledge of Polish students and teachers regarding HIV prevention. The level of sex education in Poland is unsatisfactory and many students receive no information throughout the whole period of education while many others are taught by unprepared or biased teachers. This is due to variety of factors, the major of which being the influence of the Roman Catholic church.

Description: Ponton Group of Sex Educators is a pioneer organization providing peer sex education to Polish adolescents. Its additional objective is to monitor the state of knowledge on sexual health. The group prepares annual reports based on its Summer Hotline. These studies have a fixed structure to facilitate analysis of changing trends. Every volunteer writes a report from her or his work, providing examples of text message and phone questions and estimating the number of questions related to five categories: contraception, health/body, sexuality, relationships and assertiveness. Additionally in 2009 the group prepared a report on the state of sex education in Poland based on e-mails from people under 30. Among other things the report aimed to provide examples of good and bad practices of teachers of sexuality education.

Lessons learned: Analysis of three Summer Hotline reports and report on sex education in Poland shows there is a big group of students and teachers who lack basic information on HIV prevention. An additional problem is insufficient education of young people as regards assertiveness and negotiating the use of condoms.

Next steps: The results of studies lead to recommendations regarding the implementation within South Poland, comprehensive and neutral sex education in all Polish schools and the introduction of better training programs for teachers.
MOPE0694
Integrating gender, sexuality and the sexual and reproductive health issues into the curriculum of communication studies at Atma Jaya University of Yogyakarta

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Issues: The process of integrating gender and sexuality issues into the some subject in communication studies. The program was initiated by Communication Department from Atma Jaya University of Yogyakarta, Indonesia with the Samal Perumpan, an NGO focuses to gender issues and the Ford Foundation. This project is a pilot project in Indonesia for integrating gender and sexuality issues into some subjects in the Communication Studies.

Description: The media workers write and the news related with gender, sexuality and the sexual and reproductive health (such as HIV/AIDS) become very important in the news production. They must present the news in the certain perspective and mostly present some gender biases or just blaming the victims or certain groups. Here in Indonesia, the education backgrounds of majority of the media workers are from Communication Studies.

Lessons learned: It’s very important for the Faculty or Department who has Communication Program to make their curriculum based on the sensitivity of gender, sexuality, sexual and reproductive health within the human rights sensitivity. The students will learn some subjects with important issues related with gender, sexuality and the sexual and the reproductive health. They might be can reduce or use empathy journalism if one day they work in the media industry.

Next steps: This project has started, and ideally disseminated and followed by universities in Indonesia who have Communication Program.

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MOPE0695
Teachers’ approaches to the delivery of HIV/AIDS education in junior secondary schools in Edo state

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Background: In recent times, the school has been the focus of HIV/AIDS intervention. The efficacy of HIV/AIDS programming as a behavior change strategy is based on the ample of delivery tools used from an on-going action research study, HIV Prevention for Rural Youth, which used multi media of media to understand and using research evidence to build and evaluate HIV prevention for youth delivered through schools and communities in Edo state, Nigeria. Here we specifically investigate the approaches teachers use in the delivery of HIV/AIDS education in Junior Secondary Schools in Edo State, Nigeria and their association with perceived barriers to teaching.

Methods: The presentation uses survey responses of 88 and in-depth interviews with 22 teachers from 30 Junior Secondary Schools in rural communities in Edo State selected using a geographical randomized cluster design. Spearman’s correlation was used to examine association between reported approaches to teaching and perceived barriers. Scilari N6 software was used to code and analyze responses from in-depth interviews.

Results: The delivery of HIV/AIDS education were through school assemblies and classroom teaching. Fewer than 1% of teachers reporting using participatory approaches such as drama, music, debates, or competitions. The strong, statistically significant correlations of approaches with each other demonstrate that teachers were either using a multiplicity of approaches, or if any. Although 80% of teachers felt they had insufficient training it was teacher comfort in this area rather than training that were a key obstacle to teaching HIV/AIDS in Edo state.

Conclusions: Classroom teaching and school assemblies convey information; however, they are neither participatory nor vivid enough to build skills to make safer choices. Teacher comfort with the subject matter of HIV/AIDS and sexuality appears to have the strongest influence on the use of more participatory strategies. Raising comfort-levels is important in teacher training.

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MOPE0696
The state of youth networking for sexual and reproductive health and HIV in Asia 2010

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Issues: In Asia 95% of new HIV infections in young people occur in most-at-risk groups. These heterogeneous groups face significant barriers to participating meaningfully in the HIV/AIDS response. Throughout Asia, there is an increasing number of well-established youth and reproductive health (SRH) and HIV. Mechanisms for engaging with most-at-risk youth and fostering youth leadership are limited, and impact both sustainability and effectiveness of programming and policy initiatives. It is critical for the global HIV response to understand the complexities of building capacity and leadership with young people in Asia.

Description: From November 2009 to February 2010 the International HIV/AIDS Alliance and the South-East Asia Technical Support Hub, with support from UNFPA Asia, has conducted a mapping exercise on youth networking for SRH/HIV across Asia. For the first time, the 21-country study provides a snapshot of youth networking in practice.

Lessons learned: Few young people have access to leadership opportunities and they remain challenging in most regions. Youth-led networks face challenges self-sustaining, due to barriers in accessing longer-term core funding.

Next steps: Support institutional development of youth movements at regional level. Youth-serving organisations with capacity should commit resources, support meaningful youth participation, Department of Health, Media Professionals, Department of Women Affairs, Muslim religious leader and members from and NGO working in the city.

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Community mobilization, social mobilization
MOPE0697-MOPE0731

MOPE0697
Social movement to prevent HIV, AIDS and STI: an experience from Bangladesh

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Issues: To ensure smooth service delivery to the hotel based sex worker in Bangladesh through social mobilization.

Description: To create a supportive environment for HIV, AIDS and STI prevention program among hotel based sex worker in Chittagong, Bangladesh a Project Facilitation Team (PFT) was formed in 2005. The member of this team was selected as representatives from hotel owners, City Corporation, the Department of Police, Public Prosecutor, Department of Health, Media Professionals, Department of Women Affairs, Muslim religious leader and members from other NGO working in the city.

Lessons learned: The PFT member has been seating quarterly basis to review program progress. They are advising and cooperating for reduce barriers and mobilizing social support for project activities take place. Especially they have been facilitating regular contact with key stakeholders, including sex workers, member of law enforcement agencies, hotel owners, pimps and hotel workers. As a result police is not harassing our Peer Educator and they are allowing them to conduct Behavior Change Communication session at hotel and the hotel owner/ hotel management has been giving the free access to work with the sex worker in their hotel. The Muslim religious leader has been giving speech on HIV/AIDS during the weekly prayer. Media has been publishing positive news/ article on HIV/AIDS issue on regular basis. Public Prosecutors have been working with Police in handling case related to the sex worker in the court.

As an integrated approach of PFT the program has been implementing smoothly in the city and the targeted participants have been receiving comprehensive service i.e. information, STI management service, condom and lubricant, VCT, general and psycho sexual counselling from the project.

Next steps: The members of PFT can support the project’s implementation with their local knowledge and influence. So, it can be a best model for other country.

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MOPE0698
Dialectics of community engagement in HIV/AIDS prevention - fishing communities experience

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Background: Nigeria provides a number of health services for its communities both rural and urban. However, fishing Communities are usually excluded from these services because of their locations. The prevention activities in fishing Communities of Lagos State was carried out by Nigerian Institute of Oceanography and Marine Research and Lagos State AIDS Control Agency. This project was aimed at intensifying HIV/AIDS campaign in fishing Communities and to promote health education among the Community members.

Methods: Ten fishing communities in the peninsular area of Lagos State were selected as demonstration sites. Advocacy, individual interviews and small focus group discussion were conducted with researcher and community members. The assessment of individual’s high-risk behaviors and provision of HCT for those who are willing to know their status.

Results: The project explored the challenges and successes of HIV prevention activities in these hard-to-reach sites. 85% of the community members assessed Counseling and testing services. The research conducted shows...
that 97% of these people were illiterate and also identified educational needs regarding HIV/AIDS and other health related issues with emphasis on Sexu- al and Reproductive Health. And PMTCT. Linkages and referrals were provided, and without religio-cultural hindrances; male and female condoms were ac- cepted by the community members.

Top of Form

Conclusions: Our findings showed that higher percentage of the community members is not aware of the existence of female condoms. And knowledge about PMTCT was very low. Some of the PLWHAs discovered in the community are migrants from the Cities. Some of them confessed that they cannot measure the risk because of the new stigmatization. Without any action on how to manage their health, they carry on with life with project- ing others. Therefore, there are needs for effective prevention strategies in order to build the capacity of these hard-to-reach community members in HIV prevention.

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MOPE0699

"Our second family" - this is what HIV+ youngsters of the Aids and Child Swiss Youth+Group call their group. Good psychosocial care strengthens them in coping with their illness

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Since 2002 more than 30 regular meetings of the Aids & Child Swiss Youth+Group have taken place. At two meetings, siblings were invited as well. In addition, young people attended funerals, weddings, enjoyed sewing lessons and births and wrote a book.

Issues: Psychosocial care of HIV+ youngsters is of great importance, regard- less of the medical and social background. Within the groups they can have exchange experiences with the illness and fight against discrimination.

Description: After the "Third European Meeting for Young People affected by HIV" which was organized by the Aids & Child Foundation in 2002, Swiss HIV+ youngsters demanded the setting-up of their own group. Since then, weekends have been organized on a quarterly basis. These events offer young people the opportunity to discuss all aspects of psychosocial care and coping with the illness. At two weekends, siblings were invited along and on one occasion parents.

Lessons learned: Exchanging their experiences strengthens the youngsters in facing the disease. Topics of the meetings range from education, transition, transition, disclosure, media work, memory work, sexuality, relation- ships, Aids in Africa, secondary prevention, legal questions, travel restric- tions, groups of people affected by HIV. Empowerment and capacity building improve the chances of a better life with HIV/AIDS.

Next steps: The experiences of the Aids & Child Swiss Youth+Group can be of use internationally. The fight against discrimination and marginalization of vulnerable groups must be built up from the basis. Young people can be strengthened in all social contexts. The development of platforms for young people and keyworkers in Eastern Europe and Russia must be promoted.

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MOPE0700

The position of Buyijja traditional healers’ drama group (BUTHDG) in fighting against HIV/AIDS in Mpiigi communities

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Issue: In Mpiigi district, like in other rural areas of Uganda, 70% of the popula- tion are affected by HIV/AIDS, and almost 75% have had a family mem- ber die of the disease. Many lose hope for the future due to psychological problems such as stress and depression. Many people lack knowledge about HIV/AIDS such as its causes, how it spreads and its physical manifestations, hence prompting them to discriminate against PLWHAs.

Description: Buyijja Traditional Healers’ Drama Group undertakes activi- ties that reduce the social and psychological suffering due to HIV/AIDS. The drama group started in 2000 as a system of sensitizing people about AIDS, its causes, and effects through music, dance, and drama. The main activities include composition of songs, rhymes, poems, and plays. 70 individuals have exchanged experiences with the illness and fight against discrimination.

Inadequate preventive services and poor HIV and AIDS control and prev- ention services in some risk behaviors, effective behavior change is still very slow and accurate knowledge on HIV and AIDS at community level is limited. Accessibility of fishing and mining communities is hampered by poor infra- structure hence effective HIV and AIDS interventions are not reaching these communities. The HIV and AIDS prevalence rate is between 5.5% and 7.6% higher compared to the national prevalence rate which is 5.8%.

Background: Long truck drivers threaten epidemic of HIV between Myanmar-China border area due to their cross border mobility and unsafe sexual behavior

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Next steps: To extend Buyijja drama group activities to communities in re- gion, to the mining and fishing areas in order to identify implementation gaps, challenges, opportunities in order to address the situation effectively with gender perspective.

Lessons learned: Drama promotes a positive co-operation between PLWHAs and other community members.

Lessons learned: Drama promotes a positive co-operation between PLWHAs and other community members.

Conclusions: Long truck drivers threaten epidemic of HIV between Myanmar and China, their spouse and other sexual partners due to cross border mobil- ity and unsafe sexual practices. Interventions and cross border collaboration urgently need to address issues on both sides of the border, spouse of long truck driver and CWS.

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MOPE0703

Uncovering the gaps in addressing HIV and AIDS interventions in mining and fishing communities, the case of selected mining and fishing areas in Tanzania

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Next steps: To extend Buyijja drama group activities to communities in re- gion, to the mining and fishing areas in order to identify implementation gaps, challenges, opportunities in order to address the situation effectively with gender perspective.

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Description: Tanzania Commission for AIDS conducted a qualitative study in four regions that have large scale mining and fishing activities. The objec- tive of the study was to assess current HIV and AIDS felt prevalence rates in the mining and fishing areas in order to identify implementation gaps, chal- lenges, opportunities in order to address the situation effectively with gender perspective.

Lessons learned: Inadequate preventive services and poor HIV and AIDS control and prevention services in some risk behaviors, effective behavior change is still very slow and accurate knowledge on HIV and AIDS at community level is limited. Accessibility of fishing and mining communities is hampered by poor infra- structure hence effective HIV and AIDS interventions are not reaching these communities. The HIV and AIDS prevalence rate is between 5.5% and 7.6% higher compared to the national prevalence rate which is 5.8%.

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MOPE0704
The link between migration due to droughts and HIV/AIDS: experiences from the Thar desert, India
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Issues: Thar Desert in India is among most underdeveloped regions in the world. Impacted by chronic droughts, Thar is impoverished and lacks basic amenities including healthcare. Despite drought, the region has a high prevalence of HIV/AIDS. When they return home, they bring back the infection to their families and community. Accordingly, there has been a rise in the prevalence of HIV/AIDS in the region with an estimated 8,000 people currently affected.

Description: GRAVIS, an NGO, working on healthcare issues in Thar, is running a comprehensive HIV/AIDS prevention and control project. The intervention includes training and awareness generation for community, health workers and peer-educators and identifying and linking PLHA to ART centres. A 60-bed hospital run by GRAVIS serves as satellite training centre and community care centre. In order to generate awareness and reduce stigma, GRAVIS has promoted community theater with the help of street plays and music. Till date, the efforts have reached a population of over 500,000 people. Over 90 Villages Health Workers and 70 peer educators have been trained.

Lessons learned: The practice of religious organizations in providing social assistance to people living with HIV has shown that good results can be achieved only when the professional advises to use, such as: buildings / premises, volunteers.

Next steps: The necessity to familiarize the Church hierarchy with the main substantive principles, methods and techniques of the specialist for general approval and region to the neighboring cities/states for employment. While living alone without families, these males are exposed to risk of contracting HIV/AIDS from commercial sex-workers. When they return home, they bring back the infection to their families and community. Accordingly, there has been a rise in the prevalence of HIV/AIDS in the region with an estimated 8,000 people currently affected.

Next steps: GRAVIS now hopes to expand the programme in more villages. It is also envisaged to work through Self Help Groups for more effective outreach of the project. More satellite clinics with diagnostic facilities are also required.

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MOPE0705
Improving the quality of psychosocial care for people living with HIV through the introduction of universal principles of cooperation between the specialists and religious organizations that provide services in the field of HIV/AIDS in Ukraine
M. Stanishkevych
Camfas Spece, Coordination Council Concerning AIDS, Mykolayiv, Ukraine

Issues: The practice of religious organizations in providing social assistance to people living with HIV has shown that good results can be achieved only through the involvement of appropriate specialists. On the other hand, psychological work in the Church requires a specific approach and differs from work in the public and government organizations.

Description: We have paid special attention to the need to attract and integrate the work of specialists and professionals in different spheres of activity: doctors, psychologists, and lawyers.

Lessons learned: We have identified the basic principles, which a specialist who comes to work in our programs must be aware of. There are some examples:

Next steps:
- Classic understanding of the structure and respect to the existing principles of administration in the Church;
- The necessity to familiarize the Church hierarchy with the main substantive principles, methods and techniques of the specialist for general approval and recommendations to work in the parishes;
- The necessity to take into account in everyday practice traditions and peculiarities of the religious organizations members’ outlook.

On the other hand, in order to retain a qualified staff member, representatives of religious organizations must adhere to certain principles, such as:
- To provide resources which are at the disposal of a religious organization that the professional advises to use, such as: buildings / premises, volunteers;
- To ensure the fees, appropriate to the level of specialist’s qualifications;
- To avoid redacting the client to other organizations and programs, if the expert deems it necessary and useful;
- To take conventional treatments for HIV - infection and support people living with HIV.

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MOPE0706
Using bars and saloons as an effective outreach strategy for women sex workers in the HIV and AIDS response
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Issue: In Kenya, it is estimated that there are over 40,000 bars and 10,000 saloons serving women, either informally or formally, employing an average of 4 women. Majority of women working in these settings supplement their meager income with sex work. However, human rights abuse, social and cultural barriers and stigma and discrimination associated with sex work prevent these women from accessing HIV prevention, treatment and care services available for the most at risk population. Moreover, most sex workers are migrants and otherwise mobile within towns and are difficult to reach via standard outreach and health services.

Description: Bar Hostess Empowerment and Support Programme (BHESP) has been working in Kenya for the last 6 years to address this issue and is a social mobilization strategy for sex workers, enabling them to access targeted health services. In 2009 BHESP used this strategy to conduct a successful mobile VCT services in three regions of Nairobi, Eastern and Central, where over 4,000 sex workers were counseled and tested. Today, 29 networks of over 3,000 bars and 800 saloons have been formed to provide integrated HIV services for sex workers.

Lessons learned: Using bars and saloons is an effective outreach strategy since most women sex workers spend most of their free day time in these settings. Today, BHESP has mobilized and sensitized bar and saloon owners and their managers in enhancing its outreach program. Most of these settings are currently working with BHESP, and are vital outlets for HIV information and services including condom distribution outlets.

Next steps: Working with bars and saloons for social programs is a daunting task due to resource-limited settings. There is therefore need to further build the capacity of the networks to be able to scale-up outreach to this at risk sub-population.

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MOPE0707
Comparison of four church-based PPTCT programmes in DR Congo, Nigeria and Zambia: strategies to enhance male HIV testing in antenatal care
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Issues: Despite marked improvements in rates of antenatal testing of mothers in DR Congo, Nigeria and Zambia, participation by men has remained lamentably low. Male involvement in testing is important to detect discordant couples and enable both parents to understand and comply with preventive measures during pregnancy and infant feeding. Strategies other than simple invitations to enhance male antenatal testing need to be developed.

Description: Tearfund supports church based PPTCT programmes in DR Congo (1), Nigeria (2) and Zambia (1). In 2008 these programmes developed and introduced different strategies to increase uptake of testing. The recorded uptake of testing in their antenatal registers for the first 6 months of 2009.

Lessons learned: A rural programme in DR Congo and an urban programme in Nigeria invited men to be tested for HIV by letter delivered by the pregnant partner but failed to engage more than 3% and 9% of men respectively. The second programme in Nigeria sent cards and SMS text messages inviting partners to a general discussion about antenatal care of mother and child. This provided an opportunity for couple testing and incentives such as T-shirts and achieved 56% uptake of testing by men. The rural programme in Zambia used a participatory toolkit developed by Tearfund partners about the importance of male involvement in PPTCT. They sensitised the community including TBAs using church-based networks and achieved 45% uptake of testing by partners of antenatal women.

Next steps: In most African countries where stigma against male testing is standard practice, relatively high levels can be achieved if innovative services are provided. As a result of this work new comprehensive father focused programmes are being introduced in church based programmes supported by Tearfund in 10 African countries.

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MOPE0708
Stigma reduction and mobilization among Christian and Muslim faith leaders in Indonesia
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Issues: Indonesia has a heterogeneous and rapidly growing HIV epidemic, and faith leaders can wield considerable influence, to either help or hinder the HIV response. Many Christian and Muslim faith leaders in Indonesia are misinformed about the epidemic, resulting in stigmatizing attitudes toward people living with HIV. Methods for working appreciatively and respectfully with faith leaders to improve understanding and reduce stigma are needed.

Description: World Vision Indonesia has employed an adaptation of the “Channels of Hope” (CoH) methodology with Christian leaders since 2007, and with Muslim leaders since 2009, mainly in Papua and Jakarta provinces. CoH addresses both high HIV prevalence and priority response areas. CoH is a participatory, experiential, workshop-based methodology utilising a variety of facilitation methods.
**MOPE0709**

**Multi-privileged mobilization strategy for increasing uptake of HIV testing and counseling services: lessons from East Central Uganda**

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**Issues:** The Strengthening TB and HIV/AIDS Responses in East Central Uganda (STARECU) a USAID funded program conducted a baseline survey of 9,634 community members compared to 3,352 community members (mean scores) by the same facilities during outreaches carried out in the previous 12 months. Ten health facilities per district were provided with test kits, facilitation to health workers and onsite technical support. Radio stations were contracted for mentions. Joint planning meetings were held with key stakeholders to decide on appropriate mobilization channels. Channels used included involvement of influential community members, volunteers and local leaders to let their communities know about the importance of HCT services and venues for service provision, use of radio talk shows and announcements, placement of written messages directing community members to outreach sites and use of mobile public address systems to reinforce what is heard on the radio, print and word of mouth. Application of different mobilization channels led to testing of 9,634 community members compared to 3,352 community members tested by the same facilities during outreaches carried out in the previous month.

**Lessons learned:** Use of different community mobilization channels results into convincing more community members to access HCT services. Mobilization of community members for HCT works well with facilitation of health facilities to provide the service. Use of existing community structures like the Village Health Teams is important in mobilizing communities for HCT.

**Notes:** Application of multi-privileged mobilization strategies results in mass community members accessing HCT. These strategies should also be used to improve service uptake for other health services.

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**MOPE0710**

**Creating social environments that support enhanced community mobilisation: a case study of home-based care in rural South Africa**

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**Issues:** Community participation and empowerment are a central strategy for HIV/AIDS interventions. Through participation marginalised people develop the ‘voice’ to demand greater control over sexual health. Despite empowerment programmes being common, such programmes often have poor outcomes. Research questions and interventions is devoted to building the voice of members of target groups, too little attention is paid to the essential task of building socially and psychologically building receptive social environments, which are open to hearing and responding to the needs and demands of AIDS affected or AIDS vulnerable groups.

**Description:** We outline a multi-level conceptualisation of what would constitute a ‘receptive social environment’. We base our discussion on our five-year case study of a home-based care programme in KwaZulu-Natal, South Africa. Whilst the programme was partially successful in meeting its immediate welfare goals, it failed to mobilise female volunteers to engage in home-based care, it was less successful in building: (i) supportive links between the carers and powerful members of their local community, and (ii) bridging ‘social capital’ between local people and outside agencies in the public, private and religious sectors. This project strengthened the success of the home-based carers efforts, as well as enabling the project to have developed a comprehensive understanding of issues.

**Lessons learned:** HIV/AIDS programmes need to develop actionable proposals for advocacy for support, both internally and externally, for project participants. Without building receptive social environments the long-term goals of using welfare programmes as a springboard to secure wider health-enhancing social development will have little effect, leaving opportunities to empower poor people will be lost.

**Notes:** Programmes working to empower marginalised groups need to focus on developing the voice of marginalised groups, and ensuring that these voices are heard by local and external groups and agencies capable of enhancing programme success.

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MOPE0713
“Everyday activists” against violence: linking community mobilization to successful national advocacy for legislation against domestic violence in Uganda - the Center for Domestic Violence Prevention’s (CEDOVIP) experience

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Issues: Legislation to prevent violence against women (VAW) can reduce women’s vulnerability to HIV. Yet in Uganda, legislative change proved impossible without community mobilization to create a national web of everyday activists to demand change.

Description: To challenge social norms and create a groundswell of support for law reform in Uganda, CEDOVIP implemented three interrelated program areas over a period of years:i) Community mobilization: CEDOVIP organized community activities for men and women, police and local officials to create “everyday activists” who oppose violence against women and act to prevent it in their own relationships and communities.ii) Partnerships and scale-up: CEDOVIP built the skills and motivation of nationwide partner organizations to scale-up community mobilization efforts.iii) National advocacy: CEDOVIP lobbied for enactment of anti-domestic violence legislation by influencing the media to report on VAW, coordinating a coalition of CSOs to engage in national policy advocacy, and building legislative bodies through one-on-one engagement, formal meetings and dissemination of information.

Lessons learned: Breaking social tolerance for VAW requires years of systematic and structured engagement to create awareness, change attitudes and inspire individuals, structures, institutions, and policy makers to become everyday activists to prevent domestic violence. Through this methodology, individuals connect to the issue and take it upon themselves to take small actions within their power and collectively form a strong web of activism to prevent domestic violence through legislation.

Next steps: CEDOVIP and partners will engage in advocacy to ensure that the Domestic Violence Act is asssessed by the president and widely disseminated across the country to enable its implementation.

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MOPE0714
Uniri+ (Unitii+): bringing People Living With HIV (PLWHIV) and stakeholders together; going from individual issues to collective demands and transforming these demands into co-built recommendations for better care

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Issues: Whereas life expectancy, or “quantity of life”, has significantly increased for PLWHIV in France, improving quality of life still does not mean that decision makers respond to PLWHIV’s demands for more consideration of their needs. Better recognition of adverse effects, increased attention to women’s specific concerns, to HIV/hepatitis co-infection, ageing, social stigma and perilous experiences, are amongst the issues that PLWHIV consistently raise in AIDES, the largest French community-based non-profit HIV/AIDS/Hepatitis organization.

Description: To promote Greater Involvement of People Living with HIV/AIDS (GIPA) in decisions which directly affect them, a new method was experimented: UNIR+ is about PLWHIV transforming demands into demands, and working with authorities to draft new recommendations for better care and health.

Description: First, forums were held to choose issues that PLWHIV wanted to pull in CareBox (French regional HIV/AIDS advisory authorities) agenda. Feedback from forums was provided by those who volunteered to be on the UNIR+ steering committee; a convention programme was designed, with workshops, support groups, full day sessions and leisure activities. In January 2009, 120 PLWHIV gathered for a 4-day residential event to share their experiences and elaborate collective demands; on the 5th day, 25 stakeholders, including members of several Covoris, were invited to attend and to draft a convention with the participants.

Lessons learned: Satisfaction amongst participants was high: being part of UNIR+ was a welcome change from everyday struggle and isolation. Sharing personal stories and supporting others, developing peer-to-peer solutions and creativity helped strengthen self-esteem. UNIR+ was also an opportunity to implement: participants agreed that PLWHIV’s first-hand experience of HIV made them experts, as legitimate as the professionals attending the convention.

Next steps: Evaluation of UNIR+ - a tool to enhance individual and collective empowerment, is underway, to assess effect on quality of life of participants, outcomes in annual Covorio recommendations, and impact on GIPA in the CareBox decision-making process.

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MOPE0715
Effective strategies to retain the cohort of female sex workers (FSWs) for a longitudinal study: experience from rural South India

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Issues: The University of Montpellier and Karnataka health Promotion Trust had recently completed a study with an objective to understand the patterns of migration of rural FSWs, and its link with HIV risk and vulnerability including the transmission dynamics in northern Karnataka. The study design is a cohort approach for the period of 22 months with four time periods of data collection. The study was conducted during the period of January 2007 to October 2008.

Description: Based on the experience of high ‘experimental mortality’ among FSWs in the cohort study involving rural FSWs, innovative approaches were used in order to reduce the dropouts. The effective strategies are used for: 1. Recruitment of the participants; 2. tracking of migrant FSWs; 3. addressing the power structure of sex work practice in a controlled environment; and 4. the follow-up interviews at the places of destination. The main strategy was the active participation of CRs at each stage made easier to recruit 1564 participants for the study. The CRs also contributed during data collection procedure in 1st, 3rd and 15th month follow-ups. Both qualitative and quantitative methodologies were used to address the study objectives.

Lessons learned: We found that the CRs approach was very effective in recruitment of participants and retention of them for 22 months. Even after the final follow-up of the study, the retention rate was 95%. The major reason for the dropout is deaths due to HIV/AIDS. The most important reason for the very high retention rate as well as success of the project is due to the ownership of the study by the community.

Next steps: The CRs involved in this study have become community counselors in the implementation of the HIV intervention especially among the difficult to reach FSWs who are mobile and migratory.

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MOPE0716
Addressing co-infection through voluntary peer work/treatment supporters (TS) in the Copperbelt province of Zambia, looking at community involvement, awareness, stigma, nation satisfaction, adherence and treatment outcome

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Description: Co-infection of HIV/TB is not sufficiently addressed. In Zambia, approximately 70% of TB-patients are HIV-positive. A poorly resourced and not sufficiently decentralized health system makes accessing treatment close to an insurmountable challenge for some patients. LHL has extensive experience in TB and voluntary peer work and CHEP in HIV and community involvement. In 2003, CHEP and LHL joined forces on how to bring TB and HIV together in program implementation and to strengthen community response. Training of TS is the project cornerstone. Emphasis has been put on recruiting former TB-patients and traditional healers. The role of TS is multifaceted and includes; community sensitization, following up DOTs, ensuring TB-patients are informed and tested for HIV (and vice versa), and adherence counselling.

Lessons learned: TS have a crucial role in the fight against TB/HIV at district level. Feedback from patients and health workers is; TS play an essential role throughout the care. TS have contributed significantly to improved treatment outcome, educate the community and reduce stigma. Engaging former TB-patients (many are also HIV+) as TS has been beneficial; they are a motivational living testimony of hope. Traditional healers are difficult to recruit, but once reached, they go from obstacles in the fight against TB/HIV to realising their limitations, but also their role and potential. Amidst the successes there are major challenges: Poverty and poor nutrition threaten the health of both patients and TS. Lack of incentives can reduce the long-term motivation of the TS. And ironically enough, even in a project that aims to integrate the two diseases, the TS feel they have insufficient knowledge about co-infection.

Next steps: To address poor nutrition and lack of incentives, we are training community groups on ISAs and offer microcredit (3-, 6- and 12-month) for the retention of TS. To ensure sufficient knowledge levels, we need to evaluate the TS-training curricula content and offer refresher trainings.

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MOPE0717
Programme for empowering regional teams for capacity building on the multi-sectoral AIDS committees at ward and village levels in Tanzania
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Introduction: Guided by national policies, the multi-sectoral AIDS response in Tanzania has been decentralised to assure the involvement of all stakeholders. In 2004, TACAIDS successfully coordinated the capacity building exercise of Multi-Sectoral AIDS Committees at the Council level (CMACs) to enable them coordinate the district HIV response to HIV and AIDS. TACAIDS deployed the services of national facilitators to conduct the training. It was anticipated that the CMACs would then train the Ward (VMACs) and Village (VMACs) committees, but that did not happen. Hence, TACAIDS coordinated the development of WMAC training modules and later in 2008 trained six WMACs in four regions.

Lessons learned: The training modules were well received by the WMACs. For an effective and sustainable training, we had to stop using the national facilitators. Instead the agreement was to build regional teams which would conduct training for their respective councils. It would then be easy for the same regional teams to follow-up, support and mentor the WMACs in their operations. The national facilitators are just too far so that the whole teams will be capable, hence the importance of decentralizing the training. Also the concept of “patronage” of the CMACs will be revived since it is already popular and applied in some districts for ensuring security and forging development on various issues

Way forward: To mobilize resources for strengthening a program for empowering regional teams for capacity building of the Multi-Sectoral AIDS Committees at Ward and Village levels, it is considered to be a sustainable approach where regions will be made responsible to coordinate their own Ward and Village level committees in their respective regions. Reviving the concept of patronage is being recommended for creating competition of performance amongst the officers in the regions. The intention is to have the CMACs and the WMACs functional for a concerted national response.

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MOPE0718
For men by men: increase in males utilizing clinical services and HIV testing through social mobilization in rural Lesotho
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Issues: In Lesotho, little to no health interventions are specifically targeted to men. Culturally, men tend to ignore attending clinics as a sign of weakness. Clinical workers have reported that men tend to be brought to the clinic at advanced stages of disease and sometimes die from otherwise preventable and treatable diseases.

Description: Lesotho, a country completely surrounded by South Africa, has an HIV prevalence among reproductive age adults. In April 2009, a rural clinic piloted a male-mobilization event to encourage clinical services usage of HIV, counseling, and testing (HCT), treatment of sexually transmitted infections (STI) and sexual reproductive health (SRH). The clinic serves a population of 1,000 and before the intervention served five male clients daily. To accomplish this, they hosted traditional, male-focused community gatherings as a pitho. Male nurses from the clinic and leaders from the community facilitated the gathering. Topics included health question-and-answer, clinic overview and redefining manhood. 120 men attended (ages: 21-70).

After the pitho, men were invited to test for HIV, 35 tested (29%). Compared to the day before, the day after the event the clinic had an increase from eight male clients to 14 (27%). Their daily average went from five to 12 clients per day for the next two weeks. For the next two weeks, however, the daily average decayed to pre-event levels.

Lessons learned: The pitho was successful in temporarily increasing male usage of HCT, STI and SRH services. To build a successful intervention, community buy-in, engagement and follow-up are important components. However, the delay in efficacy highlights the need for these programs to be ongoing rather than one-time interventions.

Next steps: Lesotho should invest in training health care workers in developing sustainable community-based interventions to continually engage men in SRH and HCT services as part of a comprehensive response to HIV epidemic. Presenting author email: daramjadian@gmail.com

MOPE0719
Human rights, sex work, HIS/AIDS in Peru: joining the academy and sex worker’s organizations
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Issues: Female and transgender sex workers are profoundly socially excluded communities in Peru. They are denied basic human rights, have limited access to health services and are exposed to state violence and social suffering. These conditions contribute to increase their vulnerability to contracting HIV/AIDS. A consortium formed by three organizations: one for transgender people, one from female sex workers and one academic institution, collaborated in an intervention designed to reduce sex workers vulnerabilities improving the environment in which they carry out their work.

Description: In 4 Peruvian regions, this project implemented sensitization training for national and local police in order to reduce discrimination and violence toward these populations, improved the legal framework to decriminalize sexual work and focused on strengthening the participation and organization of sex workers.

Lessons learned: Sex workers have strengthened their leadership, which has enabled them to negotiate and advocate with government and civil society. Police were sensitized to protect the work of sex workers. We developed a new law proposal drafted by the female and transgender sex workers, in order to protect their rights and the legal context in which sex work is practiced. Academy and sex workers organizations developed an interesting collaborative work experience that allowed them to look for consensus toward achieving common goals.

Next steps: The law proposal needs more discussion and socialization among different groups of sex workers before being presented. We need to continue to work mainly with police officers and extend this experience to other regions of the country.

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MOPE0720
Community based initiative help reduce HIV infection among sex workers
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Issues: Domestic violence compounds sex worker (SW) vulnerability to STIs/HIV. While physical assault perpetrated by regular partners, manager and client has a direct bearing on the likelihood of STI/HIV low esteem and guilt caused by verbal abuse also contributes to vulnerability.

Next steps: Violence Help SWS to respond to STI/HIV issues.

MOPE0721
Pediatric scale-up, a community based campaign for increased enrollment of pediatric patients
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Issue: Early diagnosis is crucial to sustain the lives of children infected with HIV. Fifty percent of HIV-affected children will be the babies of HIV-infected mothers. In Zambia, 15,000 SWs live in Mumbai and Thane. It was observed that SWs did not have any source of support and faced violence as a result of stigma against their trade. Enabling the SWs to respond to immediate threats has been an innovation of the project. Under the Aastha Telikal Seva or the rapid response system, task force committees (TFC) comprising of SW have been formed in each Peer educator (PE) site that provide immediate support to a fellow SW in crisis. TFC tackle issues of partner violence, harassment by police or goons, SWs in each PE site carry mobile numbers of their PE and TFC, who can be reached round the clock. To emphasize the role of police in prevention of STI/HIV, sensitization programs involving SWs are arranged at all police stations within the intervention area.

Next steps: Building group support and skills to tackle immediate threats of Violence Help SWS to respond to STI/HIV issues.

MOPE0722
Community based scale-up community based campaign for increased enrollment of pediatric patients

Issue: Early diagnosis is crucial to sustain the lives of children infected with HIV. Fifty percent of HIV-affected children will be the babies of HIV-infected mothers. In Zambia, 15,000 SWs live in Mumbai and Thane. It was observed that SWs did not have any source of support and faced violence as a result of stigma against their trade. Enabling the SWs to respond to immediate threats has been an innovation of the project. Under the Aastha Telikal Seva or the rapid response system, task force committees (TFC) comprising of SW have been formed in each Peer educator (PE) site that provide immediate support to a fellow SW in crisis. TFC tackle issues of partner violence, harassment by police or goons, SWs in each PE site carry mobile numbers of their PE and TFC, who can be reached round the clock. To emphasize the role of police in prevention of STI/HIV, sensitization programs involving SWs are arranged at all police stations within the intervention area.

Next steps: Building group support and skills to tackle immediate threats of Violence Help SWS to respond to STI/HIV issues.
MOPE0722 Creating a community center as a structural intervention to promote sexual health among gay men in San Francisco

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**Issues:** San Francisco has seen endemic rates of HIV, with 800-1000 new infections annually, 77.2% of which are among gay-identified and other men who have sex with men (G/MSM) (SFDPH 2004). Additionally, syphilis has increased, with 70% of all new cases diagnosed among HIV-positive G/MSM (SFDPH 2008). As many prevention campaigns continue to focus on individual behavior change (testing, disclosure, condom use), gay men are adopting asepsis-protective strategies to reduce acquisition and transmission of HIV (NHV 2008).

**Description:** A multi-year planning effort led by gay men sought to de-stigmatize sexual health and provide education that moved beyond an AIDS-based paradigm; integrate services; and instill men with a sense of ownership over their health. From this work, Magnet was created. Magnet, a program of the San Francisco AIDS Foundation (SFAF), is now in its sixth year of operations. Magnet is a sexual health services and community center located in the city’s primary gay neighborhood. Magnet’s convenient and visible location is intended to introduce the benefits of HIV testing, STI screening and treatments, and substance use and mental health counseling; and to integrate these previously disconnected services.

**Lessons learned:** Magnet has provided services to more than 24,000 visitors, far exceeding original projections of 1,500 clinical visits annually. The high demand and utilization of clinical services is helping detect HIV infections and linking gay men to appropriate care.

**Next steps:** SFAF is coordinating an international effort with Epicentre (Lima, Peru) and Heath4Men/PlayNice (Cape Town, South Africa) to convene similar interventions being designed in gay communities outside of the US. A scientific analysis is now underway with the UCSF Center for AIDS Prevention Studies to understand if Magnet has also affected men’s HIV prevention social norms and their sense of ownership over their sexual health and the health of their partners.

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MOPE0725 Does empowering marginalized women for HIV prevention matter? A global comparative study

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**Background:** As women’s empowerment as an HIV prevention strategy gains momentum, there is a need for a critical review of what is working, and why. CARE’s comparative research in Bangladesh, Burundi, Cambo-dia, India, Lesotho, and Peru examines “empowerment” strategies such as community mobilization through solidarity groups, and its effect on reducing women’s vulnerability to HIV. This research involves sex workers, migrant factory workers and women living in post-conflict areas.

**Methods:** 1800 women were purposively sampled for interviews, focus groups, and semi-structured questionnaires. The participatory research explored women’s definitions of empowerment, gender norms, and associations between measures of empowerment (e.g., agency, decision-making) and risk factors (e.g., condom use, HIV knowledge, access to and utilization of services). SPIES, STATA, and AlatasI were used for quantitative and manual coding for qualitative analysis.

**Results:** Women’s notions of empowerment reflect a tension between claiming and defending their rights as citizens and fitting in within mainstream society, and traditional gender norms. Women who participated in CARE’s programs reported higher self-esteem, overall condom use, and greater utilization of STI and HIV services, and efforts to combat institutional violence than women who did not participate in programs. Findings also show that programmatic impact was not translating to the private spheres of women’s lives. For example, sex workers reported higher, consistent use of condoms with clients, but comparatively lower use with intimate partners due to love, trust and familiarity.

**Conclusions:** Solidarity groups can empower women in ways which reduce their vulnerability to HIV. However, empowerment too often equates with knowledge and self-esteem, and overlooks structural and relational factors for reducing HIV risk. To enhance impact of community mobilization, it is essential to address dynamics of intimate relationships, understand women’s notions of empowerment, and engage community leaders.

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MOPE0726
Innovative approaches to scale up HIV counseling and testing among urban youth in Kenya
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Issues: Over 64% of Kenyans do not know their HIV Status according to the Kenya AIDS Indicator Survey, 2007. An estimated 80% of HIV infected people do not know their current HIV Status at a time when according to third Kenya National AIDS Strategic plan 2209/10-2012/13, a plan is set to get 80% of the population to know their statuses by 2013.

Description: Glue (know yourself) is a strategy developed by a consortium of youth organizations led by I Choose Life-Africa, Liverpool treatment and services and National Organization of Peer Educators to provide HIV testing to over one million youth in Kenya. Going by the slogan, Glue Niki sure Najuljua (I am sure I know my HIV status), its main attractiveness is the use of glow-in-the-dark wristbands for everyone who goes for testing under the campaign. Each glow in dark wristband has a serial number to identify each wristband and to keep track of how many people have been tested. It also has a toll free number inscribed on it in which the youth can call to get information regarding reproductive health and other post test services.

Lessons learned: Through the initiative there has been an increase to the number youth getting tested. In one site, there has been a 27% increase noted. When asked the reason for testing most of the youth attributed it to the wristband. There has also been reported increment in the number of youth enrolling on post test services through the toll free number inscribed on the wrist band.

Next steps: The campaign is rapidly becoming a lifestyle brand for the urban youth with those lacking the wristband feeling left out and pressured to get tested and acquire the wristband. There is need to utilize the serial number to track the number of youth who access referral services.

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MOPE0727
Resettlement, reintegration and comprehensive HIV/AIDS support services: a case study of Magwi county, Southern Sudan
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Background: Comprehensive service provision for People living with HIV/ AIDS (PLWHA) at the community level, resettlement and reintegration programs possess significant challenges. In this study we present a successful strategy for generating locally identified strategies for provision of care and support for PLWHAs in resource-limited Magwi County of Southern Sudan, a region with extremely limited access to quality health care services.

Methods: At the end of 2008, peer support groups for PLWHAs were established in four sub counties of Magwi County. The groups were tasked with critically assessing their needs (related to improving access to life sustaining drugs, psychosocial support, overcoming stigma and discrimination, and attaining livelihood opportunities), and then collectively discussing and proposing community level solutions that would be feasible in addressing these needs. After the initial discussion and action-planning phase, the four peer support groups worked together to conduct a feasibility analysis through which the most viable initiatives were selected for group action.

Results: Key strategies identified and implemented by support group members included organized ART collection initiatives, training of members in home based care (especially management of HIV symptoms at home), mobile ART services from existing ART gardens, and integration of non-positive members into support groups. Despite very poor road networks in Magwi County and an absence of ART clinics and primary health care centers in the focus settings all PLWHAs on ART were able to collect their ARVs from the one very distant hospital in the country.

Conclusion: PLWHAs in post conflict and resource limited settings, if well organized, as in the case of Magwi county, can be supported to develop community-level, locally driven and strategic solutions to address their care and support needs. Locally identified solutions are most likely to be sustainable, as they are relevant within the local setting and meet the needs identified by the PLWHAs themselves.

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MOPE0728
"ZOOM IN!" A project aimed at empowering youth from photography and story development technique for raising awareness on youth sexual and reproductive health and rights including HIV/AIDS and STIs
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Issues: A country where sexual harassment is considered as fun activity, where they are negligible women rights where no proper attention is given to sexual health and reproductive health, talking about HIV/AIDS STDS and STIs is a huge problem for youth. In Pakistan the religious dogmas prevent sexual education on sexuality, sexual health, reproductive health and rights.

Description: Chan Development Association (CDA), a youth NGO, joined hands with international organizations to implement ZOOM IN! in Pakistan. In this project some 50 young children (below 18 years) were trained from all the provinces of Pakistan, on digital photography followed by story development skills. The young children and the SRHR issues of their communities and developed stories from the pictures. Based on their interesting stories, CDA developed a table calendar which was distributed widely in Pakistan as an international level to raise the issues of young Pakistanis, particularly young girls related to their SRHR.

Lessons learned: It is learned that young children need an enabling and encouraging environment in which there concerns are listed to their need provide for and the rights recognized. Developing countries are having to deal with harsh realities of poverty isolation and lack of support, many have to focus on survival rather than education, many when their bodies and mind is developing, they face violence, sexual abuse or coping with sexually transmitted infections, therefore, their potentials should be utilized with interactive projects and they should be encouraged to open their minds and express their ideas.

Next steps: We recommend that young children in Pakistan need to be engaged in more creative projects to raise SRHR issues and combat HIV in their communities. Media is the best way to engage them and bridge the gap between their local issues and the national resources.

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MOPE0729
Mobilizing civil society for HIV prevention in resource-poor contexts within high-income nations: three case studies of black mobilization in the Southern United States
S. Crawford, R. Abuds-Samad, C. Baran
Black AIDS Institute/African and Black Diaspora Global Network on HIV and AIDS, Training & Capacity Building, Los Angeles, United States

Issues: Black America’s experiences in resource-deprived areas of the U.S. are more similar to developing countries than that of the high-resource countries like that which they live in. In nations where inequalities persist, the need for community mobilization which fosters community preservation and accessibility of services is critical. Over two years, the Black AIDS Institute trained 17 community leaders from distinct resource-poor settings on community mobilization theory, and supervised subsequent practice. Impact has been evaluated for two years. Challenges and successes encountered by participants contextualize the unique historical and socioeconomic environment that many Black Americans experience across the African Diaspora experience.

Description: Utilizing a community mobilization model, The Black AIDS Institute builds knowledge and strengthens networks of community leaders to engage civil society institutions in activities that maximize utilization of HIV prevention services in their communities. Trainings included in-class and practical experiences concluding with the implementation of community-driven mobilization campaigns. Three case studies are examined for their unique and valuable contributions.

Lessons learned: By building the capacity of Black civil society with programming which addresses historical marginalization and leverages a legacy of collective action, sustainable, indigenous HIV prevention movements are possible. For communities historically marginalized or ignored by the healthcare sector, traditional leaders’ uptake of an effective HIV prevention agenda can lead to substantial improvements in HIV testing and preventive behavior.

Next steps: Based on the lessons learned, further research is needed to understand the nuances and limitations of indigenous community leadership role in HIV prevention.

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MOPE0730
AIDS competence approach as a methodology to increase behavioral change - an experience from North East India
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Issues: The resources available for global response to HIV are increasing yet an authentic community-owned and sustainable behavioural change and service utilization is necessary for impact and scaling up of response.

Description: UNAIDS funded NGO’s in North East India to use an AIDS Competence Process (ACP) in 20 communities. The aim was to stimulate a community response to widespread drug use and for the care of people living with HIV. The NGO’s used the tools of dream drawing, Self Assessment and Community counselling to facilitate reflection and action by the community. As a result, the communities identified and worked on the issues of stigma and behavioural change for risk reduction, youth involvement and care. At the end of five months, a Participatory Action Research (PAR) was conducted in one community to measure the change that has happened and the processes that brought about such change.

Lessons learned: A community wide initiative to identify and care for all people living with HIV-positive people and drug users, community-owned and driven action reflects the community’s priorities and identifies potential interventions. A mapping exercise demonstrated that the community is now transferring the resources available for global response to HIV are increasing yet an authentic community-owned and sustainable behavioural change and service utilization is necessary for impact and scaling up of response.

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MOPE0731  How the AIDS movement provided a watershed, to keep North America’s only stand alone fixed supervised injection site (Insite) open
L. Evans
PHS Community Service Society, Vancouver, Canada

This presentation will provide an overview of how the mobilizing the AIDS community, and a vast community network, has helped to protect Insite, challenging existing drug laws in Canada. The Executive Director of the non profit partner managing Insite (the PHS Community Services Society) will provide an update as to the status of this initiative, the on-going advocacy efforts, and the legal case against the Federal Government, in a continual attempt to re-shape Canadian drug policy.

Issues: At the 2006 Toronto AIDS conference, members organized in support of Vancouver’s Supervised Injection Site (Insite). The Federal Minister of Health was at this conference, having recently made it clear that the future existence of Insite was hanging in the balance. Hundreds showed up to stop traffic, and express the need for the Gov’t of Canada to keep extending the exemption from the relevant Criminal Law to allow the site to exist. While this action did not result in Federal approval of Insite, it did result in an extension, buying time for the PHS Community Services Society (NGO operators in partnership with Insite). A provincial legal health authority and the Federal Government.

Description: Executive Director of the PHS Community Services Society will present an update at the 2010 AIDS Conference, about what has happened to the site since this event. She will explain the significance of the actions that have been taken to support Insite, in Vancouver, across Canada, in the International community, and how the existence of this site acts as a prominent icon to disrupt conventional wisdom around drug treat-ment paradigms.

Lessons learned: The AIDS community, advocates, service providers, and health care professionals can play a central role in challenging drug laws that result in the spread of HIV/AIDS.

Next steps: At the end of this year the PHS Community Services Society can send the mes-sage to politicians and policy makers that existing drug laws are responsible for pushing drug users to the margins of Society, where they are forced to use in unsafe environments - perpetuating the spread of disease. Using the example of Insite, working with other stakeholders in policy and grassroots non profits, to form more strategic alliances, to mobilize the AIDS community to impact drug policy.

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MOPE0732-MOPE0736

Safe virtual or physical spaces (e.g. drop-in centres, telephone hotlines etc.)

MOPE0732  Virtual reality: using the internet/technology to develop LGBT relevant messages and circumvent terrestrial restrictions on LGBT interaction in Jamaica
J.S. M. Spencer
PINK Entertainment Report, Portmore, Jamaica

Jamaica’s LGBT community is primarily an underground movement, operating in the shadows of the wider society. As a consequence, agencies involved in developing targeted HIV/AIDS awareness programmes have had to face chal-lenges relating to:

1. Access to community members
2. Venue selection i.e. choosing venues for programmes that are safe and user friendly
3. Using tools and aids that are community specific and relevant to the audi-ence members

The development of social and new media such as YouTube, Facebook and Twitter, as well as technological developments such as the BlackBerry Messag-ing Service are resulting in changes in the way the Jamaican LGBT community communicates internally. These changes do present a mixed bag of opportuni-ties and challenges especially as it regards; the development of Public Educa-tion materials that are relevant and LGBT oriented whilst maintaining the privacy settings of community members.

The impact of social and new media on the internal dynamics of the Jamaican LGBT community can clearly be seen via the changes in the methods used to advertise parties and issue invitations to social gatherings. Post the Liberaliza-tion of Jamaica’s telecommunication and internet market in 2000, marketing strategies began to incorporate text messages. While text messaging is still used, these have been largely supplanted by Facebook group marketing and twitter posts. The Blackberry smart-phone through its portability and turn-key functionality has also greatly aided in the spread of this impact. But whilst the LGBT community still remains underground, there is an emerging structure, organization and coherence. These are exploitable resources from which more direct messages on HIV/AIDS can be developed that specifically target the Jamaican LGBT community.

Funding of Public Education programmes should seek to mimic the use of the tech-applications. Notably, there will be a need to work closely with telecom-munications’ Universal Access programmes to expand internet accessibility amongst the most vulnerable.

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MOPE0733  Ensuring sustainability of trust points (TPs) for injecting drug users (IDUs) in Tashkent city, Uzbekistan, by World Vision Uzbekistan (WVU)
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Issues: TP widely known as drop-in centre (DIC) and as an effective way for engaging IDUs into Harm Reduction (HR) programming. Although a good amount of evidence on effective operations of DIC is documented, little guid-ance is available regarding sustainability of such projects.

Description: WVU started implementation of HIV project in Tashkent City in 2003. Establishment and operationalization of TPs for IDUs was the key component of the program. Around ten TPs were created in the framework of project. The project facilitated unique harmonized multi-sectoral partner-ship with various governmental entities of Uzbekistan, including the Ministry of Health, the Republican AIDS Centre and the Tashkent City AIDS Centre. Through recognition of the qualities and competencies of each sector and ex-poration of innovative approaches to channel these for the common goal, the partners shared responsibilities during program implementation. The gov-ernment offered spaces for TPs within the Primary Health Care Institutions, legal support and staff while WVU provided capacity building opportunities for TP staff, management of daily operations, equipment and required commodi-ties for TP functioning.

Lessons learned: One of critical success factors of TP sustainability was the governmental ownership over this project gained through equal partnership approach. The important principle was equity in power and decision mak-ing dynamics, resource/capacity acquisition and utilization, ensured shared responsibilities and commitment for application of this initiative. Another key success factor was the partner engagement from the very early stages of the project. According to the project evaluation findings, it was one of the most successful projects in Uzbekistan that reversed the trends of the epidemic in Tashkent City with evidence base.

Next steps: The interventions which require capital investments for creation and sustainable retention of physical spaces for HIV prevention, care and support programs are to be implemented in close partnership with local and national governments.

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MOPE0734  The significance of drop-in centers in the implementation of HIV prevention projects among sex workers in Serbia
G. Pjevac
Association against AIDS ZAJAS, Belgrade, Serbia

Issues: The purpose of this paper is to analyze the significance of ZAJAS’ drop-in center for sex workers as a ‘safe place’ in which activities can be implemented, but also a ’space’ in which HIV/STI prevention can be evaluated more in depth.

Description: Sex work is illegal in Serbia, punishable by 30 days imprison-ment and monetary fines. Due to this illegal ‘status’ of sex workers, and their discrimination and stigmatization in the community, sex workers are on the margins of society. Health and social services are often not accessible to them and they suffer high degrees of violence by pimps, clients and police. Aside from the harsh conditions of work in the streets and the existent stigma in society, there is a degree of discrimination between sex workers pertaining to drug use, gender, ethnicity, age and social status.

The drop-in center as a ‘space’, doesn’t merely offer safety; it is a ‘space’ in which sex workers are accepted, their work recognized as ‘legitimate’ and more importantly where their identities are acknowledged.

The advantages of this safe place are that the time can be spent on preven-tion efforts, but more importantly the time spent socializing with their peers and center staff has proven to be a significant ‘tool’ in the dissemination of prevention information.

Lessons learned: The decrease of stigma within the sex worker population, the incorporation of sex workers in all aspects of the drop-in center activities, peer education and efforts to include sex workers in the wider society (i.e. events to theater, conferences, meetings) has proven to be a powerful tool in prevention.

Next steps: To lessen stigma against sex workers and to empower sex work-ers to take part not only in the social environment but also take agency for the sex worker community and HIV/STI prevention within it.

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ACP is a low cost methodology to stimulate a rights based approach to com-munity wide change.

Next steps: LGBT Competence aids in inclusive and community determined change and utilization of service delivery. Partnerships are to be promoted in the rest of the 19 villages to measure the changes happening in these villages.

Safe virtual or physical spaces (e.g. drop-in centres, telephone hotlines etc.)
**MOPE0735**

Mobile shades: a time and a place for HIV/AIDS education in the daily life of tea pickers, Mulanje district, Malawi

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**Issues:** The International Labour Organization (ILO) collaborated with the Liljen Tea Estate in Malawi with the aim of reducing HIV/AIDS risk behaviours among workers. Many of the workers are migrants, who live together in compounds, but they reported that it was usual to have multiple partners, and for village women to approach male workers for sex in exchange for money.

**Description:** The ILO HIV/AIDS WorkPlace Project in Malawi engaged with 10 enterprises in four sectors including the Liljen Tea Estate and its 5,377 employees. An HIV/AIDS policy was adopted by the tea estate and an education programme was put in place. Peer educators examined a typical daily schedule to create a regular slot where colleagues would have time and feel comfortable to talk. Mobile shade are common on the tea estate, rigged up to keep the sun’s glare off the newly-picked tea while it is weighed and stored before going to the factory. The shades are also used for tea breaks. The peer educators used the shades to talk about HIV/AIDS and they became the means of integrating HIV/AIDS education in the daily life of the tea pickers.

**Lessons learned:** A survey conducted with 100 workers before and after the intervention demonstrated that the number of workers requesting condoms increased from 28% to 86% and the number of workers asking for VCT information from 6% to 18%. A key feature in the success of the programme was the innovative use of existing structures and schedules.

**Next steps:** The ILO is disseminating this and other examples of good practice to show a range of ways that HIV/AIDS interventions can be integrated at the workplace, using structures already in place, at modest cost and with great degrees of sustainability.

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**MOPE0736**

Save drop-in centres for intravenous drug users in Romania

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**Background:** The 2007 Rapid assessment of the intravenous drug using population from Bucharest showed that 17500 people use intravenous drugs. The major problems associated with IDUs are health related, such as HIV or hepatitis, and social related, with questions of daily activity, in work and in the family. 3-StiMes/day. 80% of drug users have HIV. The risk related to HIV/AIDS is big due to the limited access to sterile equipment (needle, syringes, distillate water). In Romania there are many barriers preventing IDUs from accessing health care services and information for reducing the harm caused by injecting drug use, irrespective of the IDUs age. First, the fact that the drug use is illegal. Secondly, the stigma of drug use creates social barriers for IDUs, when they attempt to access social and health services. Thirdly, the access to sterile equipment is limited because in many pharmacies syringes are not sold.

**Methods:** Through its drop-in centre ARAS aims to increase access to IDU to health care services, including VCT by offering free of charge clean injection devices and clean services in a safe environment. Beside needle exchange beneficiaries receive: protective gloves, voluntary counselling and testing for HIV, hepatitis B and C, psychosocial counselling, social services, referrals and accompanies to specialized services.

**Results:** In 2009 the drop-in services were accessed by 1934 drug users, offered 1951 medical assistances and 1981 social assistances. From July to December were made 113 HIV tests (2 positive), 98 HCV tests (9 positive) and 119 HBV tests (5 positive). From the 1934 drug users, 255 were also homeless people and 1070 were from December were made 113 HIV tests (2 positive), 98 HCV tests (59 positive) and 119 HBV tests (5 positive). From the 1934 drug users, 255 were also homeless people and 1070 were from

**Issues:** Inadequate water and sanitation increase the disease burden and pose threat for the communities. Drinking and poor housing conditions increase the risk of opportunistic infections. Inadequate water and sanitation increase the disease burden and pose threat for the communities.

**Conclusion:** From a study made in November 2009 by ARAS results that 93% of the interviewed beneficiaries were satisfied with the services provided by the drop-in centre. 89.7% of the Interviewed mentioned only positive aspects when asked how the personal treats them.

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**MOPE0738**

Access to housing subsidies, housing status and HIV risk among low-income U.S. urban residents

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**Background:** HIV researchers have increasingly called for an examination of the way structural factors impede or facilitate individuals’ efforts to avoid HIV infection. One area in particular that has received research attention is the impact of homelessness and housing status on drug injection and sex related HIV risk. Much research has shown a clear association between homelessness and increased risk for acquiring HIV. However, most studies have used dichotomous comparisons between homeless and housed participants, and few have examined the association between various forms of more permanent housing and HIV risk. In addition, little research has examined differences among subpopulations in access to free market rental and housing subsidies.

**Methods:** We recruited and surveyed 300 low-income residents in a Northeastern U.S. city through targeted sampling. We conducted multiple regression analyses to determine the net effects of personal characteristics (demographics, drug use, HIV serostatus and mental illness diagnosis), access to housing subsidies or supportive housing programs on drug use or risky HIV-related behaviors.

**Results:** HIV-positive serostatus and mental illness diagnosis significantly predicted access to housing subsidies and supportive housing programs while drug use negatively predicted access to these programs. Access to housing subsidies and supportive housing was positively associated with being currently housed. Being homeless or doubled up with family or friends was associated with higher sexual risk behaviors.

**Conclusion:** Access to housing is effective in lowering HIV risk among drug using and non-drug using low-income residents. Access to subsidized and supportive housing needs to be improved for low-income residents who are not HIV positive or suffering from mental illness.

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**MOPE0739**

The impact of housing on AIDS health care and prevention – the Chicago Housing for Health partnership

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**Issues:**
1) review of how housing can be a AIDS prevention factor;
2) the key connection between housing and health for PLWHA;
3) review of how supportive housing for PLWHA can lower hospital care loads;
4) results of the process and outcome research evaluation have begun to impact local and national policy (as well as increased housing resources of PHWA)
5) working the USA health insurance program for disabled persons who are (2) working the USA health insurance program for disabled persons who are (3) how the social determinants of health, especially housing and social support, made a significant difference in the lives of people living with AIDS;
6) results of the process and outcome research evaluation have begun to impact local and national policy (as well as increased housing resources of PHWA)

**Next steps:** (1) translating the results of the process and the outcomes of the Chicago Housing for Health Partnership into more policy and advocacy tools; (2) working the USA health insurance program for disabled persons who are (2) working the USA health insurance program for disabled persons who are (3) how the social determinants of health, especially housing and social support, made a significant difference in the lives of people living with AIDS;
6) results of the process and outcome research evaluation have begun to impact local and national policy (as well as increased housing resources of PHWA)

**Description:** A Chicago project that housed over 100 homeless PLWHA that studied the impact of housing on their immune system.

**Lessons learned:**
(1) a direct cause and effect between a housing intervention and lower viral loads
(2) the importance of strong collaboration between hospitals, shelters and supportive housing providers in a large metropolitan area
(3) how the social determinants of health, especially housing and social support, made a significant difference in the lives of people living with AIDS;
(4) results of the process and outcome research evaluation have begun to impact local and national policy (as well as increased housing resources of PHWA)

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**MOPE0740**

Housing and physical environment

MOPE0737-MOPE0741

**MOPE0737**

Connections, capacity and challenges: mainstreaming HIV/AIDS into human settlements development in Africa

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**Issues:** 1.6 billion people, 25% of the world's population lives in slums, characterised by poverty, deprivation and exclusion. HIV prevalence in urban areas is twice as high as in rural areas. Slum-dwelling poses challenges to HIV treatment, care and support particularly for women and children. Overcrowding and poor housing conditions increase the risk of opportunistic infections. Inadequate water and sanitation increase the disease burden and pose challenges to providing home-based care. Forced evictions violate dignity and disrupt adherence to treatment. Description: Since 2003, Rooftops Canada and partners in 6 African countries have adapted housing programs to respond to the impact of HIV/AIDS. These programs are successful in increasing awareness, protecting the inheritance rights of women and children, providing housing, training housing peer educators leading to reducing stigma and discrimination among housing communities. Community-driven projects are effective in providing food and income security, securing housing for PHAs and protecting OVCs.

**Lessons learned:** This paper examines the rationale, strategies, lessons and challenges from these programs in mainstreaming effective programs. Results of a six country assessment and the outcomes of a four-day capacity building workshop which brought together 30 people from 11 countries. These include: key success factors and barriers to mainstreaming, better inclusion of vulnerable groups in programs, the role of regional learning exchanges and the importance of building referral and service networks.

**Next steps:** Adequate housing is a strong determinant of health. Efforts to ensure adequate housing in slums - to secure tenure, inheritance rights, adequate water and sanitation, economic development -address many of vulnerabilities relating to HIV/AIDS. Housing and AIDS sector organizations acknowledge the need to build partnerships across their silos. This experience provides a model of mainstreaming that allows housing organizations to focus on their core business while building partnerships for AIDS services and networks for joint advocacy.

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Using new information technologies (cell phones, internet, etc.) for prevention, treatment, care and support

MOPE0742

The social technographics of men who have sex with men: implications for HIV prevention research, education and outreach

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Background: Recent literature characterizes differential patterns of the use of social media as social technographics (Li and Bernoff, 2008). This paper applies this concept to HIV/AIDS work in Canada. It explores four diverse data sets in order to demonstrate how understanding patterns of social media use can inform this work.

Methods: Analyses were conducted on the (1) North American Technologies Benchmark Survey (2008), (2) Canadian Internet Use Survey (2007), (3) M-Track Ontario (Lambra) (2007) and (4) Ontario Men’s Survey (2002). SPSS was used to explore the associations of men’s age and urban/rural geographic context with social media use for sexual and non-sexual purposes.

Results: The concept of social technographics suggests new methodologies can be classified on multi-point hierarchies. Analysis of data sets 1 and 2 suggest that in Canada, the social technographics of MSM are structured primarily by age, with younger men more likely to be creators, innovators or active consumers of social content and older men more likely to be spectators or inactive consumers. Analyses of datasets 3 and 4 suggest evolving patterns in the use of social media to seek sexual partners. While trends associated with geography were clearer than those associated with age, trends associated with both age and geography were more evident in the 2007 than the 2002 dataset.

Conclusions: HIV/AIDS work for MSM can benefit from social technographic analysis. These results indicate that HIV research, prevention and education that employ social media have a better likelihood of impact when targeted to younger men in Canada, whereas, activities aimed at older men will have a greater likelihood of impact when utilizing more traditional forms of communication. These analyses suggest MSM’s patterns of social media use for social as well as sexual purposes will continue to evolve as different and varied social media communication applications become available.

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MOPE0743


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Issues: An integrated communications approach is important in an increasingly diverse and fragmented media environment. Singapore’s high internet penetration necessitates comprehensive online strategies to maximise message reach, particularly among Internet-savvy younger adults. New media tools offers valuable opportunities in limiting the spread of HIV/AIDS while the problem is at a nascent stage, with zero-prevalence rates in Singapore still relatively low.

Description: Internet is an important component in the media consumption habits of young adults, a primary target audience for the World AIDS Day 2009 campaign which tapped on Singapore Idol, a 2.0 sociable technologies were used in the communications mix, driving traffic to an interactive website (www.loveamp.sg) containing HIV/AIDS messages and a contest. An e-Marketing strategy to extend campaign awareness and messages online was initiated. Electronic direct marketing, social media seeding, digital tactics, and social networking sites were leveraged upon to communicate messages of prevention, early detection and dispelling misconceptions, even beyond World AIDS Day.

Lessons learned: Of the 51,000 pageviews garnered, analytics data indicated that a multitude of social media sources were a significant source of web traffic. The strategy of seeding in various forums and relevant Facebook groups/pages resulted in a long-tail pattern of incoming traffic. This case study highlights various ways of engaging online audiences by tapping into social media. The experience of this campaign’s online efforts underscores the importance of using Web 2.0 technologies to sustain the interest of a target audience group whose media consumption is largely, digital. This applies this concept to HIV/AIDS work in Canada. It explores four diverse data sets in order to demonstrate how understanding patterns of social media use can inform this work.

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MOPE0744
Sexual risk behavior survey among MSM in Lithuania, 2008
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Background: To determine sexual risk behaviour peculiarities among MSM (men who have sex with men)

Methods: Online survey of MSM (n=271) was conducted by Lithuanian AIDS Centre. Respondents were asked to fill in an online questionnaire aimed at collecting information about socio-demographic characteristics, sexual risk behavior patterns. The statistical analysis was conducted using SPSS.

Results: Respondents were men with an average age of 26.9±4.8; with high education (65.3%); 46.6% of MSM had a regular male partner (RMP). 65.5% reported having had unprotected last sexual intercourse with a RMP; 68.5% of MSM had sexual intercourse with a commercial sex partner (CSP) in the last 12 month and 47.9% of them reported having had unprotected last sexual intercourse with a CSP; 21.4% of respondents had had sex with a woman in the last 12 months and 62.1% of them had unprotected last sexual intercourse with a woman in the last 12 month and 37.0% of them had unprotected sexual intercourse. The main reason for having unprotected sex with a regular partner was that they trusted their partner (71.4%) and the main reason for having unprotected sex with a casual partner was that they did not like using condom (33.3%). 83% of respondents reported that they knew where they could go to get tested for HIV. 30.3% of MSM had been tested for HIV and 95% knew the results in the last 12 months.

Conclusions: The majority of MSM reported ongoing high sexual risk behaviors (unprotected sex with casual and commercial sex partners). Only 10% of respondents had been tested for HIV. The survey suggests that MSM, associated with knowing HIV status is not a major concern among the respondents. Condom use interventions aimed at reducing risky behaviour are an urgent necessity.

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MOPE0745
Creating a social marketing campaign targeting African American men who have sex with men (MSM) in Newark, New Jersey, in an effort to increase HIV rapid testing within a high-risk population
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Issues: Newark continues to be the epicenter of HIV/AIDS cases reported in New Jersey. Black Gay Men have lead the number of new infections for the past few years. CDC data indicate that a high percentage of MSM and even HIV-unaware of their HIV infection.

Description: The African American Office of Gay Concerns (AADGC), a community-based organization, created the “Status Is Everything” social marketing campaign, an effort to increase the number of MSM taking the HIV Rapid Test in order to learn their serostatus. Focus groups were held involving the target population, resulting in a campaign utilizing traditional advertising and digital and modern technology, such as the Internet and mobile texting to reach a younger, at-risk population. Social network sites, including Facebook, Twitter, and various community blogs were integrated with increased outreach strategy involving staff and volunteers, to bring about a unique HIV awareness campaign in the city. Videos were shot using key community influencers, a popular gay Grindr poster-boy. These videos appeared on city buses and local television.

Lessons learned: Community input was vital to this process. Incentives, including “gift cards” and transportation vouchers, were also very important. The project also attracted a large pool of participants, attempting to capitalize on the incentives. The three participating health care centers/testing sites have tested for HIV and other STIs as a result of the campaign.

Next steps: The AADGC further plans on expanding dissemination to WLH. Healthy Relationships (HR) video-groups if in-person groups were not available. For equipment, women preferred video-phone vs. computers and/or videoconferencing were primary concerns. For FG and FTFI participants, the three participating health care centers/testing sites have offered incentives. The three participating health care centers/testing sites have tested for HIV and other STIs as a result of the campaign.

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MOPE0746
Is videoconferencing an acceptable strategy for disseminating a group-based effective behavioral intervention to women living with HIV in the United States?
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Background: The Centers for Disease Control and Prevention’s (CDC) Diffusion of Effective Behavioral Interventions (EBIs) program supports intervention dissemination to people living with or at-risk for HIV through the United States. However, dissemination of group EBIs to women living with HIV (WHL) is often limited to metropolitan areas with high HIV prevalence. Group videoconferencing could expand access to non-urban and lower-prevalence areas. We explored attitudes about video-group dissemination of Healthy Relationships (HR), an EBI.

Methods: WHL in Tampa, Florida, USA, discussed benefits and barriers to participating in HR via videoconferencing, accessed at community-located private “intervention stations”. 18 WHL completed one of three focus groups (FG) after participating in HR (in person). 54 WHL called face-to-face interview (FTFI) with open-and close-ended questions. Quantitative data were analyzed with PASW 18; qualitative data were analyzed using descriptive coding and thematic analysis.

Results: FG participants (M age = 41.5; SD = 7.5; 78% African-American; 6% Hispanic) preferred in-person vs. videoconferencing groups, but most expressed willingness to participate in HR video-groups if in-person groups were not available. Preferred equipment, women preferred computer with web-cam. Privacy/confidentiality and lack of familiarity with computers and/or videoconferencing were primary concerns for FG and FTFI participants. FTFI participants (M age = 43.0; SD = 10.2; 65.4% African-American/Black; 21.2% Hispanic) discussed potential benefits to video-group participation, including: a) increased honesty; b) help with sharing information and support; and c) greater privacy and anonymity than in-person groups. 57.7% were willing to “try out” a video-group and 17.3% said they might be willing to try it.

Conclusions: Group videoconferencing-especially via video-phone-is a promising strategy for expanding dissemination of EBIs to WHL. Success of video-group interventions may depend on an ability to develop and deliver interventions (e.g. privacy/confidentiality) will be maintained; and b) familiarize WHL with videoconferencing equipment. Strategies for doing so will be discussed.

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MOPE0747
Using video conferencing for linking migrant female sex workers with their families and improving service uptake - an experience from Northern Karnataka and Southern Maharashtra
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Issues: Migrant Female Sex Workers (MFSWs) are highly vulnerable as they have high client load and are mobile. At the same time they face many challenges due to geographical distance. In the next phase, remaining villages will be covered and the service will be offered closer to their homes.

Lessons learned: Offering services based on community’s need makes it easier to reach out to the targeted community. Using Information and communication technologies (ICT) helps in making advanced services available in remote and out of city areas.

Next steps: Currently in source districts limited villages are covered due to geographical distance. Information and communication technologies (ICT) will be used to cover these villages and the service will be offered closer to their homes.

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MOPE0748
Technology enabled social integration of HIV affected children in Mumbai, India
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Issues: Children perinatally infected by HIV now face a chronic disease rather than a progressive fatal one. These successes pose new challenges as perinatally HIV infected children survive into youth and adulthood. These children and teenagers highlight evolving needs of pediatric HIV care, including educational and prevention strategies surrounding sexual health and learning skills for social integration in communities and workplace.

Description: HIV-positive and affected children aged 5-18 years in Mumbai, India come to shelters severely malnourished, socially isolated, often rejected from their families. As kids survive and get older, the center is struggling to cope with their evolving needs. Intel Corporation through computer networking hopes to help these children grow into capable, healthy and productive adults. These children face barriers to education, including social isolation, family rejection, the need to work, and challenges related to their HIV status. This program has three primary objectives: to get children online, to use computer applications and have fun. Technology enabled social networking for kids in processes. Base out-of-school education to provide technology literacy. Each child’s file would be subsequently embedded in their social-network page thus facilitating measurement and tracking on an individual level.

Lessons learned: Through a highly leveraged use of technology, Intel Cor-
MOPE0749

"Have you heard?" A networking social and digital media HIV prevention program for homeless youth online: design and acceptability

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Background: Internet-based social networking interventions hold the promise of being powerful tools to reach socially marginalized at-risk populations. In the United States, homeless youth represent a group at high risk for contracting HIV/AIDS and although some prevention approaches have been shown to be effective with this population, their transient and often adult authority makes them a population for whom internet-based prevention may be appropriate. This study assessed the acceptability of a social networking, HIV prevention intervention online for homeless youth.

Method: Using diffusion of innovation theory, in the Summer 2009, in Hollywood, CA were trained as “digital media activists” (DMA). DMA engaged other homeless youth on a drop-in basis in the creation of digital media products (digital videos, online comic books, and photography). Digital media promoted HIV prevention and served as a low barrier entree into prominent norms regarding condom use and online “friending” were examined to determine acceptability.

Conclusions: 53 unique youth participated in drop-in sessions for a total of 134 visits. The MySpace network included 112 youth and the Facebook network included 36 youth. DMA viewed digital media projects as an effective way to engage a jaded and difficult to reach population in fun, novel, and non-traditional ways. Some youth reported increased condom use. DMA believed that face to face conversations during media making were more impactful than only online participation. Participants were empowered to change norms about condom use and HIV risk among a transient and jaded community of youth.

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MOPE0750

Internet use, social networking, and homeless adolescents’ HIV/AIDS risk

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Background: Researchers, parents, and policy makers worry about the impact of internet use on the HIV/AIDS risk-behaviors of adolescents. Although much work has been done on normative populations, relatively little work has assessed internet use among homeless adolescents. Much work has been done on normative populations at highest risk for HIV infection. This study assessed the impact of internet use and access to social networking technology on the sexual health of a high-risk sample of homeless adolescents.

Method: 201 service-seeking, homeless adolescents were surveyed in 2009 in Hollywood, CA, regarding internet use, means of accessing the internet, and with whom adolescents connected via social networking technology. Multivariate logistic regression models assessed how patterns of use impacted engaging in exchange sex (sex for money, drugs, or other resources), recent HIV testing, sexual health information seeking, and online partner seeking.

Conclusions: 96.5% of homeless youth reported internet use, while only 24% reported being online more than 1 hour per day. Most youth accessed the internet at public libraries or youth service agencies. Most youth used the internet for social networking websites to connect to family and home-based peers, 50% of youth used the internet to learn about HIV and 25% to find a sex partner. Youth practicing exchange sex were 18 times more likely to seek online sex partners. Youth who accessed the internet to learn about HIV and 25% to find a sex partner. Youth practicing exchange sex were 18 times more likely to seek online sex partners. Online access has a positive impact on many homeless youth by facilitating their connections to family and home-based peers. Conversely, for a minority, exchange sex is facilitated by internet use.

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MOPE0751

Texting testing 1, 2 - 3, the pitfalls and practicalities of introducing internet-based approaches for patient initiated partner notification approaches among homosexually active men in Australia

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Issues: Traditionally, partner notification has been done in person, by phone, or by mail, with the assistance of a public health practitioner. With gay men, who tend to have higher numbers of anonymous/sexual partners, often met online, these traditional clinician led partner notification strategies are often ineffective. In addition, many patients are distrustful of clinician led partner notification programs, and as such, may be less likely to complete partner notification.

Description: The VAC/GMHC developed an STI testing and treatment campaign (www.thedradmadownunder.info) for gay and other homosexually active men for the Australian Federation of AIDS Organisations in 2008, which incorporated a web based patient initiated partner notification service via SMS or email. Over the first twelve months, 1405 SMS notifications were sent. The service was also picked up for use in clinical settings, as more an anonymous way for clinicians to notify partners of source patients.

Lessons learned: Given the publicly accessible nature of a web based partner notification service, the risk of inappropriate use of the service is possible, as was evidenced in the implementation of this project.

Next steps: Strategies to improve security, reduce likelihood of inappropriate use, and improve support to recipients of partner notifications messages have been implemented, and will be discussed. Alternative forms of internet based partner notification strategies will also be discussed.

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MOPE0752

Using social media for community and partnership development to prevent the spread of HIV amongst gay and other MSM living in regional and rural Central Queensland, Australia

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The Central Coast office of the Queensland Association for Healthy Communities (QAHC) covers a large geographic area in regional and rural Australia from Caboolture in the southeast to Rockhampton in the far north, a distance of over 600 km. HIV prevention and sexual health promotion for gay and other men who have sex with men (MSM) is the project focus. As a community-based organisation with limited financial and human resources the challenge is reaching these men in ways that are appropriate to their lives in regional and rural communities. As HIV prevention for gay men is most effective when delivered in the context of broader gay, lesbian, bisexual and transgender (LGBT) health and wellbeing, much work is about community and partnership development. This has included using social media to implement health promotion activities and for enhancing community connectedness and individual resilience for those living in regional Queensland where stigma and discrimination about sexuality and HIV status remains prevalent.

The social media tools used across the region to connect with the LGBT community, that incorporates gay and other men, include dedicated websites, Facebook groups and online and printed magazines. With over 10,000 hits on each regional website since their inception, 324 Facebook friends and over 1,000 magazines printed bi-monthly, these social media tools have become increasingly effective in reaching this isolated community within Central Queensland.

A key component of this success has been the partnerships developed with local service providers and private businesses that provide media content, paid advertising, distribution outlets and supportive spaces for this community. This presentation will discuss the particular challenges in reaching men in non-metropolitan communities who internalise as well as actual HIV/HIV-related stigma and discrimination about health and HIV status remains prevalent. Much work is about community and partnership development. This has included using social media to implement health promotion activities and for enhancing community connectedness and individual resilience for those living in regional Queensland where stigma and discrimination about sexuality and HIV status remains prevalent.

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MOPE0753

MAN tot MAN: a promising ‘new media’ approach to integrated HIV/STI prevention for MSM in the Netherlands

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Background: MAN tot MAN (‘man-to-man’) was launched in 2008 to
1) bundle HIV/STI prevention efforts online and offline, 2) increase access to primary prevention interventions and care, 3) stimulate MSM to take responsibility for their own health and that of their sex partners.

The approach entails a website (mantotman.nl) that provides information on

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221
PCs, with an emphasis on web-based tools and KISP, will be designed and delivered. Distance learning tools and CME modules will be rolled out in cooperation with national authorities. The evaluation for interaction with existing training programmes. Finally, a patient forum will be included in KISP to allow patients’ stories and express their selves.

**Next steps:**

We will further analyze the data to utilize findings to improve our internet outreach programme. We had also received feedback from clients who stated that the services could be more receptive towards our services and we were able to increase our reach. We had also received feedback from clients who stated that the services were customised and relevant to their needs.

**Lessons learned:**

After the new improvements to our programme were implemented, we were able to target our programme to audiences who would be more receptive towards our services and we were able to increase our reach. We had also received feedback from clients who stated that the services were customised and relevant to their needs.

**Next steps:**

We had to use the internet to reach a wider and more diverse MSM audience, which we were not able to reach at clubs and saunas. We will further analyse the data to utilise findings to improve our internet outreach programme. Further results and implementation learning will be shared at the presentation.

**Abstract:**

Increased use of technology to deliver adherence interventions to people living with HIV/AIDS (PLWHA) requires greater understanding of technology use and attitudes toward participating in social networking health websites in this population.

**Methods:**

As part of an ongoing study to develop an online, social networking based adherence intervention, 1,647 PLWHA (87% of whom were male, 13% female, 55% gay) who were non-adherent (adherence = 95% in the past month) to their HIV medications completed an online survey between July and November, 2009. Participants reported their use of online social networking websites and mobile technology access and use, provided descriptions of their ideal online social networking health website, and identified factors that would prevent them from using such a site.

**Results:**

Social networking websites most commonly used included Facebook (64%), Poz.com forums (27%), and My Space (26%). One-fifth of participants reported not using any social networking websites, while another 25% of participants did not have a mobile phone with smartphone features; the most common phones with these technologies were the BlackBerry (14%) and iPhone (12%). Twenty percent did not have a computer (16%) sent more than 500 texts in the prior month. Participants described their ideal social networking health website as one that provides social interaction with people who share common experiences (45%), tailored HIV-information (22%), and a supportive (16%), yet monitored (13%), space. Barriers to participating in a social networking health website included privacy concerns (26%), having limited interest in such websites (14%), feeling un-welcomed in the site (13%), or one that is overly time-consuming (9%).

**Conclusions:**

As most participants already use social network sites, online social networking appears to be a promising medium for adherence interventions. Texting, but not presently web-access via mobile technologies, appears to have wide appeal. In developing effective adherence support interventions, social networking websites and texting must be promising delivery systems.

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**MOPE0754**

**Using online media to educate hard to reach MSM on safer sex**

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**Issues:**

In Singapore, HIV/AIDS programmes can only be conducted in limited settings due to reach out to MSM who do not visit NGOs or DoH establishments or who do not identify themselves as gay. We need to reach MSM through innovating ways on the internet. Singapore’s Internet penetration is 72% and makes for the perfect environment.

**Description:**

We conducted a review of our internet outreach programme. Volunteers who conduct the outreach were equipped with the profiles and common queries of MSM. The data showed that most of our clients are young MSM and self-identified bisexuals. Clients were also concerned about issues on how HIV is developed and how they can prevent it.

We revamped our internet outreach programme by targeting specific chat rooms. This also helped to target MSM on mobile phones, who we were not able to reach at clubs and saunas. We also compiled a common question and answer sheet for the volunteers. In addition, we provided in-house training for our volunteers to regularly update their knowledge on HIV/AIDS.

**Lessons learned:**

After the new improvements to our programme were implemented, we were able to target our programme to audiences who would be more receptive towards our services and we were able to increase our reach. We had also received feedback from clients who stated that the services were customised and relevant to their needs.

**Next steps:**

We had to use the internet to reach a wider and more diverse MSM audience, which we were not able to reach at clubs and saunas. We will further analyse the data to utilise findings to improve our internet outreach programme. Further results and implementation learning will be shared at the presentation.

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**MOPE0755**

**Combining tradition and innovation to improve professional capacity in Central Asia**

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**Issues:**

Kyrgyzstan and Tajikistan are home to relatively limited HIV epidemics, but tuberculosis (TB) prevalence is high and incidence of HIV, TB and harm reduction services are also low. These scarce resources are being used to meet the need for expanded ASRH services in countries with relatively limited budgets. Best-practice services are hindered due to insufficient access to international developments and limited information in Russian.

**Description:**

Health Connections International (HCI), having successfully completed its first year of operations, relies on a combination of traditional development aid approaches to building professional capacity amongst ASRH infrastructure and knowledge of key PEPFAR partners. Two other user surveys (N=363) and Google Analytics provided additional data on reach, recall, appreciation and delivery.

**Results:**

Familiarity with mantotman.nl increased over time (from 6% in 2007 to 9% in 2009). Significant differences in attitudes, intentions and testing and testing behaviour were found between those who were familiar with the website and those that were not. Of those unfamiliar with the site, 28% tested for HIV/STD in 2007, 29% in 2008 and 37% in 2009. Of those familiar with the site, 36% tested in 2008 and 46% in 2009. Similarly positive effects were found for KISP knowledge. The analysis of the user surveys and Google Analytics showed approval for the website and a positive evaluation of the site’s advisory tool for healthier sex. One third of those advised received suggestions for major improvements in their sexual health. The recommendations were often followed: 51% were tested for HIV after the presentation.

**Conclusions:**

MANN to MAN contributes to the formulated goals, reaches the target populations, and stimulates individual action for sexual-health improvement.

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**MOPE0756**

**A needs assessment of people living with HIV/AIDS (PLWHA) to develop an online HIV medication adherence intervention**

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**Background:**

Increasing use of technology to deliver adherence interventions to people living with HIV/AIDS (PLWHA) requires greater understanding of technology use and attitudes toward participating in social networking health websites in this population.

**Methods:**

As part of an ongoing study to develop an online, social networking based adherence intervention, 1,647 PLWHA (87% of whom were male, 13% female, 55% gay) who were non-adherent (adherence < 95% in the past month) to their HIV medications completed an online survey between July and November, 2009. Participants reported their use of online social networking websites and mobile technology access and use, provided descriptions of their ideal online social networking health website, and identified factors that would prevent them from using such a site.

**Results:**

Social networking websites most commonly used included Facebook (64%), Poz.com forums (27%), and My Space (26%). One-fifth of participants reported not using any social networking websites, while another 25% of participants did not have a mobile phone with smartphone features; the most common phones with these technologies were the BlackBerry (14%) and iPhone (12%). Twenty percent did not have a computer (16%) sent more than 500 texts in the prior month. Participants described their ideal social networking health website as one that provides social interaction with people who share common experiences (45%), tailored HIV-information (22%), and a supportive (16%), yet monitored (13%), space. Barriers to participating in a social networking health website included privacy concerns (26%), having limited interest in such websites (14%), feeling un-welcomed in the site (13%), or one that is overly time-consuming (9%).

**Conclusions:**

As most participants already use social network sites, online social networking appears to be a promising medium for adherence interventions. Texting, but not presently web-access via mobile technologies, appears to have wide appeal. In developing effective adherence support interventions, social networking websites and texting must be promising delivery systems.

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**MOPE0757**

**The empowerment of officer’s involvement in providing sexuality and reproductive health information for children in SERU program (adolescent sexuality and reproductive health/ASRH education program through information technology-based for children in prison) in Indonesia**

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**Issues:**

ICPD in Cairo, noted a very important issue that education of ASRH is a right for all young people, as well as children in prisons. ASRH’s education is very important and must be conducted continuously. In this case, the role of officers who are part of the existing system will be significant. As a result for their cooperation, the process of providing information of sexuality and reproductive health will run smoothly in a comprehensive and sustainable.

**Description:**

Since 2008, YPI has conducted ASRH approximation program for youth through IT media called SERU. This program is specifically aimed for children who are in prisons and have no access to get information from outside. This program also involves the children and officers in making the program.

Moreover, the program allows the child to be the subject of education. Besides that, the correctional officers are assigned to be facilitators. Finally, the children can have equal positions with the facilitators.

**Lessons learned:**

So now, 20 officers in Thailand children prisons have been trained as the facilitators. They were provided with the information about ASRH, HIV/AIDS, drugs, and life skills. So far, the trained officers have conducted 3 classes of SERU with 60 students and 250 children. Having observed them in their classes, the Officers have shown good performance; they can communicate well with children that children feel comfortable to share stories and express their selves.

**Next steps:**

The program’s sustainability is a problem that often occurs in Indonesia, especially prisons. In many cases, the program will soon end after the institution finished of terminating programs. Therefore, the involvement of officers in the prison would hopefully be a solution to maintain all the programs set related to ASRH information’s development, the action must also be helped by the strict rules set by the Government.

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MOPE0758
Using an interactive short message service (SMS) data collection system in an HIV pre-exposure prophylaxis (PrEP) trial in Kenya and Uganda
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Background: Collecting behavioral data via interactive SMS is innovative but little is known about feasibility and response rates in low income settings. We present preliminary results using SMS to interactively collect sexual activity data on a daily basis from HIV at-risk populations in Kenya and Uganda as part of a PrEP safety and adherence trial.

Methods: 144 men who have sex with men (MSM), female sex workers (FSW), and HIV-discordant couples (DC) in Kenya and Uganda were randomized to daily or intermittent (encirca/telipovir or placebo to assess safety and adherence to PrEP. Each volunteer received a mobile phone, SIM card, and individual instruction on SMS messaging. Volunteers received daily SMS during 4 months follow-up with one question about sexual activity and one question about condom use in their language of choice, and provided numerical responses (e.g. 1=Yes, 2=No) at no cost. Queries and responses were password protected.

Results: Data on 100 volunteers comprising 37% of study follow-up time is presented (full data will be available July 2010). The median response rate for MSM/FSW (Kenya) was 29%, increasing to 42% when with major server outages were excluded. Median response rate for DCs (Uganda) was 67%, increasing to 76% when excluding major network outage days. Network outages lasting >2 hours per day occurred on 17/95 days in Kenya and 8/95 days in Uganda. Problems with SMS gateway providers required changing mobile networks and associated SIM cards at two sites. Lost mobile phones were not common in either country.

Conclusions: Using SMS to collect clinical trial data in low-income countries is technically possible, but major challenges of server outages and network interruptions need to be addressed and field-tested in advance. Volunteer technical and acceptability factors may also contribute to suboptimal response rates and warrant further study.

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MOPE0760
Combining theory and technology to reduce individual barriers to sexual health promotion: lessons learned from an online hepatitis B vaccination promotion intervention in MSM
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Background: Despite existing recommendations and initiatives to promote vaccination against hepatitis B, a significant minority of French MSM is still not vaccinated. Using theorizing in health psychology, we developed an online intervention (www.unvaccinpourlesgays.fr) aimed at providing information, reducing perceived barriers and motivating MSM to obtain vaccination.

Methods: Participants were recruited through a major gay Internet site and men eligible for vaccination were enrolled in an online RCT. Arm 1 (control condition); CC) provided information about hepatitis B and vaccination. Arm 2 provided identical information and also addressed perceived barriers. Arm 3 provided information and in addition the group was planned to obtain vaccination. Arm 4 delivered the full intervention. After exposure, the impact of the program components on perceived barriers, intention and perceived self-efficacy regarding vaccination was assessed.

Results: A third of the 2,040 MSM who initiated the survey up until 1 February 2010 were eligible for hepatitis B vaccination. Of these, 600 men provided complete data. The full intervention (4th arm) was found to reduce perceived barriers to vaccination (2.5 vs. 2.8 for CC, p=.001; theoretical rank: 1-7) and to increase both intention to vaccinate (5.2 vs. 4.6 for CC, p=.006) as well as perceived self-efficacy (5.8 vs. 5.5 for CC, p=.028). The impact on actual vaccination will be assessed at Month 3 (March 2010).

Conclusions: Behaviour change programs are more effective when they go beyond information and address other aspects of motivation and action initiation. The strategy employed in the present brief intervention, which consisted of addressing known perceived barriers to vaccination and supporting planning to obtain vaccination, was found to be effective in motivating men and holds substantial promise for health promotion in other domains, in particular PrEP prevention. Achieving high impact with behaviour change interventions is relatively easy when relevant theorizing and technologies are combined.

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MOPE0759
Fast cars and HIV prevention! Reaching youth through new technologies
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Issues: Youth need to be adequately informed about HIV. Parents often do not have sufficient knowledge and skills to speak about prevention with their children, whereas teachers assume that parents should talk with the children at home. Youth do not receive essential information on HIV and AIDS through the adults who are closest to them. It is essential therefore to find meaningful ways to engage and reach youth.

Description: Recognizing the importance of technology to youth and for learning, UNESCO has developed the first ever computer game on HIV and AIDS. ‘The game entitled “Fast Car” is a Flash-based game that can be downloaded and played by PC users. The game presents HIV-prevention information in an interactive, educational and fun format. The player is asked HIV-related questions (in total five tracks) and at the end of the game receives a score. The technology, the game, the questions and the information are a package that is meant to speak to and ultimately empower youth. This initiative aims to fill the gap in the computer games area, particularly in developing educational games which combine education and entertainment. It - (i) promotes science education, particularly related to HIV and AIDS prevention, treatment and care; (ii) addresses risk behaviour of youth; (iii) tests whether technology will be a cost-effective means of widening access to health education programmes.

Lessons learned: Interactive multimedia tools such as computer games can be used as a dialogue, especially balanced-gender relations, self-study and self-expression as well as present and share science content. In addition, technology is a cost-effective means of widening access to health education programmes.

Next steps: The computer game will be distributed freely on Internet and in off-line formats such as DVD and will be translated into other languages. Other storyboards ideas will be prepared.

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MOPE0761
Tackling HIV/AIDS and TB through communication and information technology (TACIT)
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Issues: Communities provide the front-line response to HIV, serving as ser- vice providers, analysing outcomes of local programs, meeting the needs of hard-to-reach populations who may face stigma and discrimina- tion. The intervention (www.unvaccinpourlesgays.fr) aimed at providing knowledge, sharing, election of constituency representation and consultation; and developing community capacity in ICT, policy, advocacy and documentation.

Lessons learned: There is an important role for ICT platforms to enhance national, regional and global linkages and information flows for policy and advocacy. ICT is also critical for stimulating dialogue and mobilizing communities to be agents for social and policy change. Civil society plays an important role in shaping national and regional policies. Self-sustained, nationally-owned information platforms are essential for the success. This includes strengthened partnership building and collaborative working for better coordination on joint advocacy campaigns and combined activities and services.

Next steps: The project will continue to engage most at-risk populations and marginalised groups, including women and girls to ensure gender equality and advance their participation in ICT and the TB responses.

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Exhibition

Poster
Exhibition

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25.7% do not understand the routes of HIV/AIDS transmissions and how to prevent HIV/AIDS, 24.3% do not realize about the knowledge of HIV virus or confuse the symptom of people after becoming AIDS, 12.1% “had self-diagnosis about AIDS symptom and always accept the wrong information from wrong resources, for example piler forum on internet, other website, or friends”, 8.2% “had the attitudes of over-stigma, over-worried, or over-afraid to infect HIV/AIDS”, 7.5% “do not understand the limitation of the HIV screening test”. 6.8%“the information about screening test on HIV/AIDS are not enough clear”, 6.1%“do not realize what the risk behavior and how to definition”, 2.1%“do not understand and represent the meaning of the result in screening test”, and 2.1% the confusion and wrong cognition from professional services.”

Lessons learned: Fear of acquiring HIV through everyday contact with infected people, because of lack of enough knowledge and information” and “Linking people with HIV with behavior that is considered improper and immoral means that people had stigma with HIV infected people but not correct to prevention HIV/AIDS.

Notes: To provide and improve including correct transmission, condemn using wrong, risk behavior identify, screening test, symptoms on AIDS.

MOP0763
Using mobile phones to mobilize for HIV counseling and testing
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Issues: In Uganda there are 8 million with mobile phones, and SMS messages have become popular among youth. This provided an opportunity to design interventions to reach many people with HIV related information and motivate them to go for HIV prevention services. The main objective was to increase the knowledge and understanding and demand for HIV services.

Description: AIDS INFORMATION CENTRE Uganda (AIC) collaborated with Text to Change (TTC) a Netherlands based organization working in the least developed nations to develop innovative advocacy campaigns that use the latest insights in marketing adapted to Uganda’s context. We used text, voice and data services via mobile phones to disseminate and collect health related information. Radio talk shows were made to sensitize the public. Three questions on AIDS were sent each week; if the recipient answered correctly, a confirmation SMS was sent and guaranteed free HIV testing is available at AIC Arua branch. A total of 2,550 (17%) of the 15,000 subscribers responded to the questions in Mbarara district. 253 participants (183 males and 71 females) turned up for HIV counseling and testing at AIC Mbarara. In Arua district 2,100 (21%) of the 10,000 subscribers responded to the questions in Arua district. 255 participants (183 males and 72 females) turned up for HIV counseling and testing at AIC Mbarara. In Arua district 2,100 (21%) of the 10,000 subscribers responded to the SMS quiz. Of those who responded 677 (376 Males and 301 Females) turned up for HIV counseling and testing at AIC Arua branch. Overall, there was a 46% increase in utilization of HCT services during the campaign period.

Lessons learned: The program is cost effective, improves the HIV knowledge levels and can be replicated in other health care services.

Next steps: More support will be sought to scale up the use of mobile services in the promotion of HCT and related services in Uganda.

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MOP0764
Improving employee timekeeping through biometric scanners and the impact that it will have on staff
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Issues: As FPD depends on R1 billion of PEPFAR funds, to run projects, the programme’s accounting and budgeting framework is driven by funding, stability of staff scattered across the country making control difficult. The problems with the present system of collection are: Supervision of all FPD staff at the clinics is done by DOCThe PFD supervisor visits once a week and has many tasksThese are limited resources in the clinic. The present form of timesheets is cumbersome and has not been updated since PEPFAR came on board. This has resulted in not having a timesheet collection tool and it is time intensive.

Description: A biometric scanner was installed at 50 FPD supported ART clinics in 3 provinces:
• The biometric scanner scans your finger when you enter and leave this location is sent to the FPD mainframe server.
• Formal letter to FPD staff on the Hast Manager to avert negative attitudes towards the scanner.
• Feedback on the FPD staff who have not used the scanner.

MOP0765
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Issues: E-learning, text messaging and social media approaches are rapidly becoming an innovative component of HIV/AIDS prevention education. More companies are using these new technologies as part of their human resource offerings to engage employees, communicate benefits, and improve learning and development processes. Integrating technology into HIV/AIDS workplace efforts can help employees worldwide reach a global HIV prevention education audience in a meaningful and effective manner.

Description: LS&Co. designed an e-learning HIV/AIDS approach to deliver targeted and engaging HIV/AIDS education worldwide. A creative framework for e-learning activities and social media tools was developed that integrated HIV/AIDS education into a virtual storyline, taking employees from design to production of a pair of Levi’s. HIV/AIDS educational messages are integrated into the experience as the story unfolds in various locations around the world.

Next steps: LS&Co. will measure the impact of an HIV/AIDS e-learning approach to demonstrate its success as an effective corporate strategy.

MOP0766
Accelerating-prevention: supporting online dialogues for improved prevention programming
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Issues: Following the SADC Think Tank meeting (2006), there was an expressed need for a process or platform for ongoing review of the evidence related to HIV prevention as well as engagement of a broader multi-sectoral audience in regional dialogues on the key drivers. SARADS in partnership with Health and Development Networks (HGN) and UNAIDS established and moderated an issue-based electronic discussion forum “Accelerating-Prevention” to continue the discussion with a wider group of experts.

Description: The eForum (using Lyris software) was launched in April 2007, the bi-monthly discussion topics focused on the key drivers of the HIV epidemic. The eForum resource invited key experts on a topic to write key discussion papers for each topic, and using a series of questions, moderated a discussion that further interrogated the evidence around the key drivers. Archives of the discussions remain a useful resource for eForum participants. The length of discussion for a topic is determined by the level, number and quality of postings contributed by members of the eForum.

Lessons learned: The discussions on the eForum create a space for more than 500 HIV prevention experts. The online dialogues managed to bring out lessons learned on sensitive issues such as criminalisation and stigmatisation which could not be discussed on open platforms. Members could anonymously share their views without fear of victimisation and these were further deliberated at policy making levels in the region.

Next steps: Moderated eforums are an effective means of promoting dialogues on emerging issues. It is key to build capacity of civil society organisations to utilise ICT platforms to enhance dialogue and advocacy as the information otherwise strengthens their programmes.

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MOPE0767 Young people informing and counselling of the HIV on the web
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Issue: New information and communication technologies (NICT) / Youth Participation / HIV/AIDS

Description: Young people are the main carriers of HIV/AIDS in Latin America. They are the principal group in which health care services are attended, and they make up 50% of the infected in this region. NICTs can be a powerful tool to help these groups. The presentation will present the project ‘Memory Work’ which was an emotional and beneficial event for both parties. While in theory adolescents were keen to share their stories, in practice many viewers filled out the contact form to express interest in volunteering. Furthermore, a total of 146 YouTube videoclips, posted in Brazil, were located, using the four search keywords combined. One quarter (25%) of the videoclips were advertising, 19.5% was related to religion. Most of them (70%) portrayed HIV prevention, and viewer-posted comments were enumerated. Data analyses were conducted immediately following videoclip retrieval. The presentation will also present the findings of a study of how female adolescents inform the HIV epidemic in Brazil, and how female adolescents’ description of their own lives is related to their socio-cultural setting.

MOPE0768 The effectiveness of social media in recruiting volunteers for HIV vaccine trials
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Universidade Federal do Rio de Janeiro, IESC, Rio de Janeiro, Brazil

Issue: New information and communication technologies (NICT) / Youth Participation / HIV/AIDS

Description: Adolescents and young people make their contributions to a character who characterizes a diversity of young people. The answers are given by adolescents and other young people with the accompaniment of a technical team. This project is led by the Institute of Education and Health (Peru) and has the technical and financial support of the International Center for Development Research (IRDC) and the Institute for Connectivity in the Americas (ICA). The experience has been spread to other Latin American countries and has been adapted in Ecuador, Mexico, Bolivia, Argentina, and Paraguay. Lessons learned: Adolescents and young people have high skills for handling technologies, and the portal encourages them to use it to inform and guide on HIV, reaching thousands of users. The adult-youth partnership is very powerful for the construction of spaces of empowerment. Yes, it is possible that the technologies will be the service of HIV prevention. In young people’s hands high quality products can be achieved through Internet, so the youthfulness has its spontaneity, preventing messages will have a youthful accent.

Next steps: Strengthening the strategy throughout Latin America.

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MOPE0769 How community-based agencies used policy changes and media campaigns to promote HIV testing to MSM in England and Wales
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Issue: UK community-based organisations were traditionally cautious about promoting HIV testing. Research showed, being mostly hospital-based, that testing also presented barriers to MSM. Both factors resulted in lower testing rates than comparable countries. In order to normalise testing and reduce undiagnosed infection THT, leading the CHAPS partnership of community organisations (funded by the Department of Health), sought to identify and reduce obstacles to testing.

Description: THT adopted recommendations that all MSM test at least annually. From November 2008 it delivered a partnership three national mass media campaigns encouraging repeat testing. The focus was on levels of understanding and ease of testing (highly visible, rapid tests), and improving perceptions of hospital-based clinics. A web site addressed common obstacles around testing and clinics (eg, fear and inconvenience), helping men locate community-based and clinical testing services (www.thinkhiv.co.uk).

Lessons learned: Caution around testing among community organisations is disappearing but persists among MSM. Research showed men have an outdated understanding of HIV infection, what happens in clinics and minimise risks of being undiagnosed. Focus groups, especially of young men, did not endorse fear-based approaches to the promotion of testing (they had high impact but failed to motivate men to test). Statistical data on increased life expectancy was not personally motivating but linking testing with taking control was. Awareness of rapid testing was low and men wanted more promotion of it. Only by addressing barriers to accessing HIV tests can testing be effectively promoted.

Next steps: In its work to reduce undiagnosed infection THT is adoptingpro test recommendations for other groups and will encourage similar organisations to follow. Community-based rapid HIV testing will be expanded among MSM and other groups. The testing website and other campaign elements for MSM offer a model for future work around reducing undiagnosed HIV with other groups such as UK-based Africans.

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MOPE0770 DigiART - using digital storytelling as a therapeutic intervention for children living with HIV in Zimbabwe
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Issue: Digital Storytelling uses photos and film to help people tell their stories. Although the therapeutic benefits of creative expression are well recognised, the potential of combining digital technology and narrative therapy as a therapeutic intervention and advocacy tool for children has not been fully realised. Description: Six HIV-positive adolescents were trained to create a film in which they narrate their life story accompanied with their own photographs. Participants wrote poems or short stories which they recorded in a studio before taking photos to accompany their soundtrack. Participants were trained to use computer software to create their 5-minute film depicting some aspect of their life. Principles of child protection were fundamental to project design.

Lessons learned: Six films were developed. Each adolescent’s story described painful life events related to diagnosis, disclosure and stigma. Adolescents described their physical and emotional journey following starting ART, developing support structures and gaining new confidence, self esteem and hopes for the future. Adolescents were proud of their films and the way they had overcome difficulties, which they had not before shared. This process served both as a personal therapeutic intervention and advocacy tool which could potentially help others. All chose to show the films to their carers, which was an emotional and beneficial event for both parties. While in theory adolescents were keen to share their films more widely (eg to peers, policy makers, communities in general) in practice they were nervous about this.

Next steps: DigiART will be scaled up to enable more adolescents and caregivers to tell their own story. The digital stories clearly demonstrate the benefits of ART and would serve as a powerful treatment advocacy tool for policy makers and other children. However, fear of stigma requires that the films be anonymised before public release.

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MOPE0771 YouTube as a source of HIV/AIDS prevention information
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Background: The Internet has become one of the main sources of health information. Today, content generation is no longer limited to the healthcare professionals. A large percentage of Internet users regularly search for health-related information. In recent years social media websites, such as YouTube, Facebook, MySpace, Twitter, and Second Life have become increasingly popular, especially for teens and young adults. Users are changing from consumers of web-available information to resources and generators of information and content. This study analyzed how HIV/AIDS information was portrayed in videoclips and viewer-posted comments available on YouTube.

Methods: YouTube (www.youtube.com) was queried on February, 2010, using the search terms HIV, AIDS or SIDA and prevention to identify and download relevant videoclips. Videoclips were classified as either positively or negatively portraying HIV prevention, and viewer-posted comments were enumerated. Data analyses were conducted immediately following videoclip retrieval.

Results: A total of 146 YouTube videoclips, posted in Brazil were located, using the four search keywords combined. One quarter (25%) of the videoclips were advertising, 19.5% was related to religion. Most of them (70%) portrayed HIV prevention, and viewer-posted comments were enumerated. Data analyses were conducted immediately following videoclip retrieval.

Conclusions: These results demonstrate that there is a wide variety of information on YouTube regarding HIV/AIDS prevention. As a result, public health and medical professionals should recognize the importance of social media websites and their potential usefulness for disseminating health information and the ethical challenges associated with the content found.

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MOPE0772
A technology-based intervention to reduce non-injection drug use in HIV patients

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Background: The HIV epidemic is increasingly connected with non-injection drug use (NIDU). In HIV patients, NIDU is associated with poor HAART adherence and sexual transmission of HIV. Developing interventions to improve the health of those with HIV/AIDS and prevent new infections is crucial. Brief Motivational Interviewing (MI) reduces drug abuse, but complex patients need additional intervention. The problem is how to extend MI to fit into busy, often understaffed HIV primary care settings. Therefore we designed a technologically-based behavioral intervention based on Interactive Voice Response (IVR) to enhance MI and meet these needs.

Methods: A 2-arm randomized pilot trial conducted in a HIV primary care clinic. The Trial (1) 31 MI sessions and (2) 2-arm participation in a 2-minute automated daily telephone to an IVR self-monitoring system that covers drug use behaviors, with graphed personalized feedback from IVR data presented by the counselor at 30 and 60 day follow-ups. 40 HIV patients with current NIDU were randomized to MI or MI+IVR.

Results: Of the patients, 75% were male; 67.5% black; 37.5% lived in unstable housing, 52.5% had hepatitis. Retention was 82.5% at 60 days. Issues with "medical" marijuana use complicated the intervention for 7 patients, who were excluded from analysis. Primary drugs among the other patients were cocaine/crack (76%), heroin (19%) and methamphetamine (9%). Days of primary drug use and $$ amount used decreased more in MI+IVR than MI-only (9.6x vs 0.5x, 0.62 and 0.52, respectively) by 60 days. Qualitative patient reports indicated that the calls were easy and helpful. Clinic staff were enthused at the success of the intervention.

Conclusions: This study indicates feasibility and suggests efficacy of a technologically-based intervention to reduce NIDU in a busy HIV primary care setting, even among patients with limited resources and many problems. A larger trial is warranted to determine efficacy.

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MOPE0773
Innovative telephone help line through public private partnership

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Issues: HIV/AIDS remains to be perceived as a stigmatized infection among the public. An innovative line named Hello+ was launched to facilitate people with high risk behaviour and people living with HIV/AIDS to communicate in confidence with trained counsellors and be linked to care centres, health care providers, NGOs and Positive Networks.

Description: Hello+ helpline is an innovative initiative to increase access to HIV/AIDS education and counselling by providing sexuality information and referral into regional languages for PLHA and their family members and friends and family members through a Toll Free helpline as a BPO model in India. It is a unique Public-Private Partnership model where the Government of India (GOI) and USAID funded the HIV/AIDS Prevention and Control Project (APAC-VHS) which is funded by USAID has joined hands with Tata Business Solutions (TBS) and Tata Communications (TSS) to initiate a call centre based helpline. Hello+ model also involves the active participation of other stakeholders like State AIDS Control Societies (SACS), HIV+ networks, NGOs and professional in provision of services.

Lessons learned: The Hello+ helpline is in a pilot initiative and in a span of a year it has received 20,000 calls with an average of 600 calls per day. Majority (80%) of the calls were from males in the age group of 20 - 30yrs, with questions on HIV/AIDS, location of various services like NGOs, ICTC centres etc.

Next steps: This is a meaningful IPP initiative which calls for a stable, long term relationship with the private sector whereby all collaborators must make appropriate contribution to the project. The PPP nature of the project is the key to its sustainability and is a model for other business houses to take the lead in contributing to the country’s response to the HIV/AIDS by joining hands with the NGO and Public sector to strengthen these programmes.

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MOPE0774
Together we stand: staff engagement as key to leveraging Facebook as a knowledge translation tool

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Issues: Ensuring scientific evidence is accessible to policy-makers, health care professionals and other knowledge users in a timely fashion is an essential component of an effective response to HIV and AIDS. The widespread potential of Facebook and the penetration of social media as an information source provide unique opportunities for HIV/AIDS education and knowledge translation strategies.

Description: The BC Centre for Excellence in HIV/AIDS (BC-CfE) is dedicated to improving the health of people with HIV through the dissemination of compre- hensive research and treatment programs for HIV and related diseases. To make this information accessible to knowledge users the BC-CfE engages in a range of HIV/AIDS knowledge translation campaigns involving press events, educational programs, and community engagements. In 2009, a Facebook Page was launched to capitalize on and complement ongoing external engagement and education. Here we present an exploratory data analysis of user activity and group growth to determine areas for further research and development.

Lessons learned: Group growth was strongest in the initial weeks of the Facebook launch. Initial group growth was associated with staff members’ interactions with the Facebook Page (i.e., joining the group and inviting their networks to do the same). Posts related to high-profile events and press coverage appear associated with increases of group growth and page activity. Data suggest that most supporters who were active on the page during these initial months were either staff members or members of their networks.

Next steps: Our results suggest that engaging staff by the internal promotion of the Facebook page is an effective means of jump-starting the knowledge dissemination process. Feedback to date has consistently indicated that post- ings to the Facebook site should be frequent and highly relevant to target audiences. Further longitudinal monitoring of group growth is underway to evaluate the evolving dynamics of this process.

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MOPE0775
Lessons of 18 months of experience with the work of preventing HIV/AIDS in a virtual world

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Issues: Experiences with a new form of communication between people in a virtual environment to prevent of AIDS. The hype cycle of the technologies and obsolescence.

Description: In December 2007 we created a virtual headquarters of STD/AIDS Prevention and Control Project (APAC-VHS) which is funded by USAID has joined hands with Tata Business Solutions (TBS) and Tata Tele Services (TSS) to initiate a call centre based helpline. Hello+ model also involves the active participation of other stakeholders like State AIDS Control Societies (SACS), HIV+ networks, NGOs and professional in provision of services.

Lessons learned: The hype cycle lasted just over 2 years. Conduct prevention of HIV with these new technologies allows people to raise awareness, but work with only one of them is too risky.

Next steps: There are still many opportunities to explore the virtual worlds and 3D environments. The ability to reinvent itself out either through charac- ter (avatar) makes it easier for people to talk about fears and doubts.

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MOPE0776
Reached a depth: HIV/AIDS prevention and service support the LGBT people through online counseling

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Issues: To date, LGBT community representatives do not have access to quality advice of professionals (lawyer, psychologist, consultant on HIV/AIDS, etc.). This situation is determined by several factors:

1. Fear of Coming-out does not give community representatives easier contact experts directly.
2. Lack of access to the friendly specialists advice in the regions of Kazakhstan.
3. Failure and intolerant attitude from the part of various government and private services representatives.

Description: In the middle 2009, in the scale of the PRECIS project, supported by CDC Netherlands, NGO Amulet opened the site www.amulet.kz, which are conducted on-line consultation of friendly professionals. Online consultation is a good alternative, they allow beneficiaries to feel 100% ano- nymity of the service, because consultants couldn’t see there faces. Sitting in front of the monitor screen, beneficiaries can ask any questions and not named them self. Also, during online contact with the counselor, the benefi- ciary has gradually come to the level of confidence when he is ready to talk with a doctor face to face.

During six months in 2009 there were held 98 online lawyer consultations, 92 by psychologist, 4 by consultant on HIV/AIDS. Our results suggest that engaging staff by the internal promotion of the Facebook page is an effective means of jump-starting the knowledge dissemination process. Facebook Page was launched to capitalize on and complement ongoing external engagement and education. Here we present an exploratory data analysis of user activity and group growth to determine areas for further research and development.

Lessons learned: Questions came to consultants from different regions of Kazakhstan. It became clear that on-line consultations are in great demand among residents from different regions of Kazakhstan.

To achieve counseling "hidden" representatives of the LGBT community, who do not attend clubs, parties, promotions, meeting places.

The web based counseling is practical, convenient and is easily update.

Lessons of 18 months of experience with the work of preventing HIV/AIDS in a virtual world

Next steps: Planned expansion of areas of on-line consultations. So in 2010 on the site work consultants: antiretroviral therapy, hepatitis B and C, equal to equal, gender issues.

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Community strengthening, building social capital MOPE0778-MOPE0812

MOPE0778
Informal waste collectors at risk: informants for a changing world
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Informal waste collection is a common poverty driven coping strategy within most developing urban cities. Despite their recorded contributions to economic growth and environmental conservation (Mitchell, 2008, Hayami et al., 2006), informal waste collectors are often harassed by authorities and slip through social service programs. Life on the dump exposes this group to various risks including, abuse, drug/alcohol related violence, poverty, food insecurity, water scarcity and severe health risks associated sourcing food and working with garbage (Sampson, 2009; Mitchell, 2008). This paper identifies the many risks associated with the varied responses young informal waste collectors adopt in coping with poverty and the impact of HIV/AIDS within their own lives, and within their support networks (specifically risk behaviours associated with poor health decisions and vulnerability to HIV infection). We reveal the success of an experimental capacity building action research process designed specifically for young informal waste collectors in Grahamstown, South Africa. Drawing from an in-depth study of the key livelihood practices and socio-economic backgrounds of 80 teen age and under 21 informal waste collector youth groups, a grassroots modeling process was developed in a series of participatory open workshops. The process allowed participants to virtually engage with risky livelihood choices through a combination of forum theatre, traditional African puppetry/masquerade and hip-hop as a tool to reflect and critically analyze complex problems associated with their behaviors through new, commonly informed perspectives. We found that informal waste collectors are dominated by young men, however girls and young mothers were observed engaging in the dump. High priority risks included, drug abuse, exposure to hazardous toxins and pathogens, gang violence, and food insecurity. This group expose themselves to a variety of risky actions to make ends meet, yet despite perceived positively to the use of an arts-based risk reduction methods.

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MOPE0779
Improving food security for families infected and affected by HIV/AIDS from resource constrained families. Dealing with the effects of climate change
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Issue: Changing trends in climate variability, coupled with human activities including environmentally insensitive farming methods has infected harsh and sometimes irreversible damages on the soil resources and caused the disappearance of traditional systems, and farming systems. The effects of climate change, crop production has continued to decrease because of rising temperature, increased rainfall, soil erosion and drought. For families infected and affected by HIV/AIDS, the effects of climate change has brought about unemployment, many suffer food insecurity as well as nutritional deficiencies and this has made life even more unbearable.

Description: KWOSP in 2008 initiated a project that aimed at improving food security for families infected and affected by HIV/AIDS so that they could cope with the situation they find themselves in. The project worked with 20 rural families infected and affected by HIV/AIDS within North Ugenya sub-county of Ugenya District and helped them to rediscover skills to grow, cook and store indigenous crops, such as millet, sorghum, cowpeas, cassava and sweet potatoes that have high nutritional value and can withstand the drought.

Lessons learnt: It is desirable that nutrition becomes a facet of care, but it is imperative that when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale up ART utilization and treatment, and when efforts are made to scale...
empowerment of female sex workers is also fundamental. Efforts should be made to develop community based organizations of female sex workers that provide community identity. Aides must also continue to uphold women’s rights for the benefit of their peers including right of income control and financial autonomy.

MOPE0783
The use of dialogues in addressing the inter relation of HIV/AIDS to credible based violence: HIV and AIDS and women’s rights
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Issues: HIV in Zimbabwe continues to affect more women than men through high infection rates amongst women and girls, the burden of care for the sick and the struggle for livelihoods to sustain families. The patriarchal structures in South Africa and Southern Africa have shown to women’s rights to have as certain adverse cultural practices. The use of community dialogues as a programming strategy addresses some of the deep cultural notions that deprive women of their rights that had been adopted for use by SAM AIDS.

Description: SAM AIDS in Zimbabwe, launched a project from 2007-2009 enabling men and women to identify problems that hinder them from fully enjoying their rights, especially sexual and reproductive health rights. The project was being trained to organise the identification of women’s rights through dialogue. The purpose of the dialogues was to bring to the fore the strengths of cultural practices that can be adopted widely to reduce the risk of HIV infection for women/girls and for communities to identify modifications to adverse cultural practices. Community advisors were then identified by the communities to continue mentoring and supporting people beyond the project period.

Lessons learned: Change in customs and tradition of people can be blended well with new knowledge gained through dialogue and training, to enable acceptance.

Next step: Due to the success of this model, it has been replicated by other programmes in Southern Africa and is being adopted for other cultural settings. Meanwhile more partners in Zimbabwe are demanding training on the model for mainstreaming into their development programmes.

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MOPE0784
Seronet.info as a community-based living space
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Issues: Web sites are two only virtual meeting places. They generate "living communities" that shape the lives of their members. In the case of Seronet info, a web 2.0 community on site for PLHIV, it successfully breaks isolation but it also contains unexpected limits.

Description: As well as providing information, social networking websites have contributed to the use of the internet as a way to date or make friends. In the same way, Seronet offers many ways for its members to interact (profiles, blogs, forums, chat rooms). As HIV-positive people are strongly affected by isolation, this network gives visibility, removes geographical frontiers and allows people to find others with the same serostatus to personalize their avatar. People can thus undertake. An organisation member takes over supervision of commercial activities for each group. The group chooses the chair, Vice, Secretary and Treasurer. They also have an account with one of the banking institutions in the country. Ten groups of women consisting of 94 people have been given an initial funding amounting to 1,250 United States dollars per group at a reimbursement rate of 55%. The project was funded by the Zambian National AIDS Network (Zaan).

Lessons learned: Income generating activities contribute in the fight against sexually transmitted infections like syphilis, even prevent HIV re-infections among people living with HIV especially women etc, as the women support themselves and their families thereby becoming useful in their communities because they participate in income generating activities. They also manage to send their children to schools or colleges thereby lessening the number of street kids. This improves HIV/AIDS health conditions as well.

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MOPE0785
Using Afro-Caribbean hairdressing salons as mobilization platforms to raise awareness on HIV in the black community in Saint-Denis, the largest town in the suburbs of Paris, France
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Issues: Saint-Denis is home to one of the largest Afro-Caribbean migrant communities in France. In this area, 64.5% of HIV-positive test results are from this community. It is critical to give this community counselling, prevention materials and access to accurate information on the basics of HIV.

AIDES, the largest HIV community-based organization in France, implement ed the first prevention outreach programmes in St Denis. Using the principal of empowerment, AIDES activists set up partnerships with Afro-Caribbean hairdressers, where Afro-Caribbean people socialize and can be reached by AIDES.

Description: Within 6 months; AIDES managed to get the workers of 9 hairdressing salons to discuss HIV related health topics with clients. The first step was to inform and train the hairdressers on HIV. Then we provided different tools to facilitate the discussions on these taboo topics. Finally, once a week, AIDES activists visited the salons to continue the training sessions. Each of the clients individual interviews on prevention, supply the salons with prevention materials, and facilitate debates. Within 3 months, AIDES had contacts with 307 different people (185 men 122 women), and done 117 interview prevention. 435 brochures, 3,510 male condoms, 345 female condoms were distributed by the hairdressers.

Lessons learned: The hairdressers’ involvement helped the clients to accept prevention, the households were reached by AIDES, survival rates as expected were made with men. It was quite difficult to find confidential and quiet rooms to do the interviews. Managers of the salons were the key people to mobilize in order for the project to work. Hairdressers don’t have time to go to group training sessions. Visiting the salons regularly is therefore crucial to complete and follow up one-to-one training so that the hairdressers do not get overwhelmed with clients’ more and more precise questions.

Next steps: Develop the project with other salons showing interest in the project.

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MOPE0786
Income generating activities as an effective strategy to support women infected with HIV/AIDS: the case of Coalition of Zambian women living with HIV/AIDS - the Zambian experience
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Issues: Zambia with a population of 12.4 million people has poverty levels which are at 80%. The HIV/AIDS population among household accentuates the income fall of the entire population in general and particularly people living with HIV. This makes women to prostitute themselves in order to earn a living. To reverse this situation, the Coalition of Zambian women living with HIV/AIDS (Cozwha) has come up with the idea of income generating activities (IGAs) to help women support themselves. The pandemic has left many female headed households with no means of survival.

Description: The women in Lusaka living with HIV are encouraged to form support groups. Each support group has a committee, place and program of meetings. They are trained in basic business skills such as agriculture, poultry, tailoring, catering/restaurante management, tail dye, interior and exterior designing, pottery etc and they choose what activity they wish to undertake. They also have an account with one of the banking institutions in the country. Ten groups of women consisting of 94 people have been given an initial funding amounting to 1,250 United States dollars per group at a reimbursement rate of 55%. The project was funded by the Zambian National AIDS Network (Zaan).

Lessons learned: Income generating activities contribute in the fight against sexually transmitted infections like syphilis, even prevent HIV re-infections among people living with HIV especially women etc, as the women support themselves and their families thereby becoming useful in their communities because they participate in income generating activities. They also manage to send their children to schools or colleges thereby lessening the number of street kids. This improves HIV/AIDS health conditions as well.

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MOPE0787
Community action teams: a cost effective, culturally sensitive strategy to increase the scope and quality of HIV prevention
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Issues: HIV prevention projects face the challenge of reaching their audience with a sufficient dosage to promote behavior change. Interventions are often designed at the central level and lack the involvement of the community. As a result, many HIV prevention projects fail. CHAMPION project in Tanzania, addresses these obstacles through the Community Action Team (CAT) Model—a strategy that promotes community based cost effective interventions that address identified needs.

Description: Each of CHAMPION’s 12 districts is a CAT composed of 15-20 community members selected through participatory community meetings. CAT members receive training on strategies to engage and transform male gender norms. They conduct a participatory community needs assessment, identify priority issues, and develop year-long action plans to educate and raise community awareness, which they implement through a local ‘lead NGO.’ As a result, CHAMPION’s range of interventions is community-driven and based on local needs. Interventions are even thought provocative—and are succeeding in provoking sustained community discussions necessary to bring about social change regarding men’s role and HIV infection. Key accomplishments, challenges and adopted mitigation strategies are presented.

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strategies will be discussed so that the CAT Model can be replicated in other programs.

Lessons learned: CATs are the ‘public face’ of CHAMPION. The success and reputation of the project is directly linked to the capacity of CATs. Ongoing support and training are critical. CATs receive transport allowances for training, but other intangible benefits such as increased social standing and opportunities for career advancement keep members engaged and active. The result is that individuals with HIV prevention education are extremely low.

Next steps: CATs have been successful in creating demand for services. The project will extend the scope of training to include advocacy to increase their impact on policy and systems and services.

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MOPE0770
Building the human capacity of churches to confront HIV/AIDS: can the church do more?

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Background: Since the onset of HIV/AIDS, the church has been inundated with tasks of developing and ensuring the availability of care and support to the sick and bereaved. Churches have been involved in a variety of HIV/AIDS activities, ranging from prayer for those infected to the provision of orphan care. In Uganda, 60 percent of the respondents from countries other than Liberia reported that the church relied on volunteers, but these volunteers are not trained.

Results: The church does not have enough trained leaders and volunteers. Over a third (34%) of respondents from Liberia reported having limited human resource capacity; 44 percent reported having no such capacity to implement HIV activities. In Uganda, only 19 percent of the churches hired staff to work on HIV/AIDS programmes. They rely heavily on volunteers. More than 50 percent of the churches from countries other than Liberia reported that their churches relied on volunteers, but these volunteers are not trained.

Conclusion: Churches have neither enough staff nor skilled personnel to carry on HIV work. Church leaders are overworked and overwhelmed. Even considering the comparative advantage of churches at the grassroots level, the survey shows that there are still gaps. The largest of these gaps are the lack of appropriate skilled personnel, able to direct holistic, integrated, quality HIV/AIDS programmes; and the inability to provide incentives to volunteers. The dearth of people skilled in HIV/AIDS is identified as the major constraint to churches’ developing or expanding their HIV/AIDS response.

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MOPE0779
ProActividad - not just waiting to be helped!

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Issues: Marginalized youth are a vulnerable population with complex needs. Many face poor educational prospects, uncertain futures and lack basic skills. HIV-positive youth are especially vulnerable. These youth have little recourse when they are denied jobs or lose them based on their HIV status.

Description: Through a self-help initiative called “ProActividad” we have launched a social enterprise to provide employment opportunities and job training for marginalized youth. “ProActividad” reinvests profits into the community. It is both a training facility and a commercially run enterprise including a fully equipped print shop. It provides youth the opportunity to learn work, life skills, job connections, and career development assistance. It aims to improve the skills and employability of marginalized youth encouraging them to teach others the use of equipment, computer skills, internet skills, youth are paid entry-level wages and are accountable for duties and responsibilities of a business, ordinary business procedures.

Lessons learned: To effectively target marginalized youth it requires more than a simple training and treatment to combat HIV/AIDS. It is also necessary to tackle the underlying structural issues that heighten their vulnerability. When provided with opportunities marginalized youth have shown that they are capable and talented. In the first six months of operation ProActividad has had contracts for over US$60,000. Its varied portfolio includes commissions to develop and print IEC materials distributed throughout the Caribbean, and make a documentary on youth and transactional sex in Haiti and the Dominican Republic that was filmed and produced by a crew including HIV-positive youth trained in camera use and production.

Next steps: The results of ProActividad will be used to advocate for a national response that more fully recognizes the inter-relatedness of health and other valuable social ends such as education, employment, and civil rights.

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MOPE0790
Certification programme of district chapters of the network of Zambian people living with HIV/AIDS (NZP+Z)

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Background: NZP+Z is the network of PLHIV in Zambia. It comprises support groups that are community, faith and work-place based. We have in excess of 4,000 PLHIV support groups based in all 73 districts.

In 2008 NZP+Z started the consultative process of putting all documentation regarding the operation of the network from our basic structure of the support group to the national board into one “Management Handbook.”

Methods: Standards were developed with the assistance of the SHARs (USG/ JSI). 6 pilot districts were selected and were oriented to the standards and carried out supervised self assessments. Visits were scheduled and at each point the chapters re-assessed their performance in the following areas: Governance and Leadership; Administrative Management; Personnel Management; Program Management; Financial Management; Support Group Capacity Development; Monitoring for Improvement. In January 2010 a team of external assessors comprising staff from the national AIDS council at district level were oriented to the process.

Results: Two out of the six chapters showed that they reached the 30 performance standards set for them. One chapter that failed to implement the governance and leadership performance standard found that it was unable to meet most of the other performance expectations as a result. The external assessors recommended the certification tool as one that could be used with CBO’s.

Conclusions: Where PLHIV community based leadership takes control of their roles and responsibilities in oversight of the chapters service delivery to the support groups and PLHIV task force place. Certification operates not only to create demand for improved performance of chapters at various levels, it also clears misunderstandings of roles and responsibilities and improves the quality of services to PLHIV. The use of local NAC representative cemented the previously weak understanding of the role of PLHIV in the community response to HIV & AIDS.

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MOPE0791
Shaping paradigms: institutionalizing community based organizations (CBOs) of female sex workers (FSWs) and men having sex with men (MSMs) in Kerala, India

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Issues: Community Based Organizations (CBOs) play a pivotal role in facilitating and sustaining behavior change among FSWs and MSMs. Low educational level, unawareness about fundamental rights and statutes and inability to build up structures, systems and linkages obstruct the growth of CBOs.

Description: During June 2008 to September 2009, Kerala State AIDS Control Society implemented a programme for strengthening of CBOs, aimed at institutionalization and strengthening of 16 CBOs in the state. The programme comprised of:

• Creation and dissemination of a manual highlighting administrative procedures, structural mechanisms and milestones;
• Hands-on support for preparing profiles brochures and annual reports;
• Coordination of a peer leaders conference for mutual experience-sharing and learning;
• Aid in systems building and standard procedures for decision making, staff selection and fund raising;
• Assistance for democratic election of office bearers; support in need-based capacity building, developing linkages and collaborations with other entities.

Lessons learned: Observed positive outcomes of these initiatives are:

• all 16 CBOs are now legal entities adhering to official statutes and Acts and have independent offices and documentation systems.
• membership in CBOs increased from 900 to 2200 active members and 5000 associate members.
• all CBO projects secured the highest grade in the annual evaluation conducted by National AIDS Control Organisation;
• 43 FSWs/MSMs are employed in 16 CBO projects compared to 21 in 42 non-CBO projects;
• Democratic elections replaced weak leadership and proactive community leaders took over, of whom 250 are FSWs and MSMs;
• CBOs raised 10 million Indian Rupees from non-HIV/AIDS prevention programmes;
• number of FSWs/MSMs filing legal complaints to redress grievance has increased from 6 in 2008 to 67 in 2009.

Next steps: Strengthening CBOs is a viable approach for building up sustainable programmes especially among marginalized groups. Adopting structured mechanisms with quantifiable milestones is recommended.

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**MOPE0792**

"Area empowerment" as a strategy to encourage the involvement of PLHIV communities in comprehensive HIV/AIDS healthcare services in West Java

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**Issues:** Indonesia is developing country in Asia, and like most countries in the region, is facing a growing AIDS epidemic. In West Java province, there are over 3,200,000 people living with HIV (PLHIV), spread out across 26 cities and towns, constituting the highest number of cases in all 33 provinces of Indonesia.

**Description:** Rumah Cemara is a community-based organization of drug users and people living with HIV/AIDS in West Java, founded in January 2003. One key program called “area empowerment” is aimed at strengthening the provincial response to HIV/AIDS and thus engages 23 cities and towns across West Java. The program goal is to create comprehensive and sustainable health services for PLHIV, and therefore facilitates the formation of peer support groups of PLHIV who play a role in overcoming HIV/AIDS, and works together with the Provincial AIDS Commission, provincial government, and local hospitals to improve the coordination of health service provision to PLHIV.

**Lessons learned:** Rumah Cemara has already formed 52 peer support groups for PLHIV and people affected by HIV/AIDS in West Java, with the total number of 4,929 people living with HIV (PLHIV), spread out across 26 cities and towns affected by HIV. The program has increased availability of access to antiretroviral medication to 11 cities and towns in West Java, created various memorandums of understanding between the PLHIV community and various stakeholders like the Department of Health, Department of Social Welfare, hospitals, community health centers, the Provincial AIDS Commission. Area empowerment has additionally ensured the meaningful involvement of PLHIV within the structure of the Provincial AIDS Commission.

**Next steps:** Area empowerment is a necessary strategy in order to ensure that PLHIV are not always simply the recipients of services, but instead play an active, comprehensive role in making comprehensive health services available in all regional HIV/AIDS programs.

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**MOPE0793**

Building local capacity and engaging the community to increase effectiveness of HIV programs

S. Khatri1, P. Chaudhary2


**Issues:** In a concentrated HIV epidemic like Nepal, various economic, social and legal vulnerabilities put certain populations at increased risk of HIV. As one of the principal recipients for Global Fund Round 7 program, Family Planning Association of Nepal, which has implemented various HIV/AIDS programs in their respective communities, is implementing programs for migrant and mobile men who have sex with men (MSM) populations. Local community-based organizations were selected as sub-recipients to implement the programs for mobile populations. It was evident in the planning phase that the sub-recipients lacked capacity in various aspects of program implementation. This paper tries to document the process of building local capacity of local organizations to improve program effectiveness for the migrant component.

**Description:** While the selected SRIs were experienced in HIV, their scope of work in the past was limited. Prevention programs were implemented using the peer approach and establishing VCT centers in high migration areas. Training needs were identified during planning workshops, reporting gaps, and various meetings and discussions. To facilitate an accelerated implementation of the activities focused trainings, such as HIV program management, building, Material provision, engagement in community dialogues, good supervision, regular continuing education. The CBVs are provided with incentives, given patient referral options and recognised as important voices in the running of the program. The CBVs are currently providing services such as assisting in health centre activities, Nutrition education for mobile people, generating income for patients and monitoring them, patient advocacy, doing door to door campaigns, giving health education and act as liaisons between the community and health system.

**Lessons learned:** CBVs can be very effective and act as the glue that holds the local health care system together. In West Java, the SAfAIDS trained CBVs have helped increase access to health services (particularly among rural settings), improve quality of care and contributed to broader community development. As "in-between, CBVs draw on their insider status and understanding of the community to change the power dynamics between the sex worker and her clients to enforce safer sex.

**Next steps:** Collaborate with government and other stakeholders to address issues related to how CBVs are recruited, organised, and compensated.

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**MOPE0794**

How the organizational development contributes to the community-based organization's responding to the HIV/AIDS in China

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**Issues:** Mengzi County (located in Yunnan Province, China) is seriously impacted by HIV/AIDS and has been identified as a high prevalence area. As a community-based organization (CBO), the "Kangxin Homeland" works with IDU/PLH/AID/MTCT peer groups and their families in Mengzi and their neighboring counties and towns to help and support HIV/AIDS transmission. Limited by historical and social factors, many people, including government officials, are unable to look at CBO, especially the IDU/BDU correctly. Because of poor organizational development, support and potential role of local community-based organizations would be a problem and finally the effective involvement of the CBO in the community would be affected. Although in China there are many CBGs in the field of HIV/AIDS in the same county/city/prefecture, but most of them are lack of good communication and information sharing, which lead to unreasonably resources allocation and ineffective information exchange.

**Description:** The capacity-building small-grant project funded by the International HIV/AIDS Alliance has increased the local CBG's organizational capacities as well as local HIV/AIDS responses. In the small-grants project, the group has developed mechanisms to coordinate CBGs within and across organizations (including government departments and local community-based organization), which allows us to show the government that community-based organization are effectively assisting government efforts. In addition, communications with other groups have promoted exchanges and mutual learning among community-based organizations.

**Lessons learned:** 1. the organizational capacity building is an indispensable part of the community-based organization development.

2. Building an information and communication platform between government departments and CBGs will promote organizational development and enable community-based organization to better respond to HIV/AIDS.

**Next steps:** Mengzi Kang Xin homeland will continue to strengthen the group's organizational development with the TS from the International HIV/AIDS Alliance from Dec.2009 to the end of Sep.2010. Besides it, the home- land will organize the related trainings by themselves, the home- land will organize the related trainings by themselves.

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**MOPE0795**

The role of community based volunteers (CBVs) in health system strengthening in Zambia

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**Issues:** Community based volunteers (CBVs) play an essential role in the national health system in Zambia. In an environment where there is a critical shortage of trained health professionals and health care workers are overburdened, CBVs are the first line of care for the majority of the population. The CBVs and community health workers are the most trusted people in the community. They therefore provide a safety net for all people marginalized in the health delivery system. The CBVs deal directly with PLHIV, many of whom are already weakened by the disease, and people living with the stigma and discrimination and enhanced self esteem and confidence to deal with various stakeholders, reducing fear, and increasing comfort to access services.

**Description:** SAaIDS has adopted the cascading approach to complement government efforts in improving health at the community level by building the capacity of over 5,000 CBVs to deliver HIV services and improving linkages between CBVs and formal health service delivery system. The project involves capacity building of CBVs to take on additional responsibilities and enhancing their capacity to manage and coordinate their work, including improved communication with other stakeholders, including government representatives, to better coordinate service delivery. The CBVs are also provided with data collection tools and other materials to support their work.

**Next steps:** SAaIDS has adopted the cascading approach to complement government efforts in improving health at the community level by building the capacity of over 5,000 CBVs to deliver HIV services and improving linkages between CBVs and formal health service delivery system. The project involves capacity building of CBVs to take on additional responsibilities and enhancing their capacity to manage and coordinate their work, including improved communication with other stakeholders, including government representatives, to better coordinate service delivery. The CBVs are also provided with data collection tools and other materials to support their work.

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**MOPE0796**

Learning to say ‘no’ to clients through building own financial base

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**Issues:** How to build the economic security of sex workers with an objective to change the power dynamics between the sex worker and her clients to enforce safer sex.

**Description:** The sex workers collective of Sonagachi took an initiative to build their economic capital base through developing a cooperative society which was registered in the named of USHA during 1995. At present there are around 13,000 members of the cooperative and the annual turnover of USHA is equivalent to US $2.5 million. These resources are put money in the cooperative. Roughly 4000 sex workers took loan/annum to put their children in better school, buy land, met up exigencies etc. Usha enabled sex workers to manage their income more efficiently. Economic sustainability of sex workers enabled them to refuse clients who is unwilling to use condom. The daughters of sex workers through USHA got an opportunity to build their career. This has reduced stigma and discrimination and enhanced self esteem and confidence to deal with various stakeholders, reducing fear, and increasing comfort to access services.

**Next steps:** Creating a sustainable business model that ensures economic and political empowerment for sex workers and their clients to access safer sex.

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MOPE0797
Capacity building and motivational stipends for community based volunteers: strategy for sustaining community action and cascade of HIV programmes

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Issues: Community Based Volunteers (CBVs) play an essential role in the national health system in Zambia. In an environment where there is a critical shortage of trained health professionals, CBVs are the first line of care for most patients. They are committed and usually forgo personal undertakings to serve their communities. The government currently offers no compensation to CBVs, who report feeling underappreciated and overworked, and are leaving their posts in high numbers. The high turn over among the CBVs is partially due to inadequate incentive schemes and the low retention rates create a gap in health services and growing losses of time and resources for training replacement.

Description: SADAIDS has trained a team of CBVs in treatment literacy, who are engaged in implementing a door-to-door sensitization campaign on ART. With support from the Global Funds through the Zambia National AIDS Network (ZNAN), SADAIDS also pays the CBVs some motivational stipends of US$5.00 per visit. SADAIDS has so far trained more than 5000 CBVs, who have reported that the capacity building trainings and the motivational stipends have motivated them to continue working. Working with these dedicated CBVs, SADAIDS has since 2006 reached 142,833 individuals with vital information on ART.

Lessons learned: Capacity building can be an incentive as it raises the social profile of the CBV in their community and opens other opportunities for them. Payment of motivational stipends has also demonstrated that communities are willing and eager to carry forward the HIV work themselves for very little in return. This shows that organisations do not need huge sums of money or highly skilled personnel to implement programmes at grassroots level.

Next steps: Donor agencies should consider investing in the people who carry out the HIV work at community level, by building their capacities and paying them small motivational stipends.

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MOPE0798
Providing HIV/AIDS services in challenging communities: lessons from health professionals’ fellowship program in Nigeria

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Issues: Health workers in Nigeria operate within challenging environment as a result of inadequate qualified human and material resources. Trained workers are unable to convert their knowledge into action and to mobilize their community to affect sustainable improvements. Additional skills are required to face these challenges and to promote a sustainable change in the delivery of quality health services in underserved and challenging environments. MSH Nigeria received funding from USAID Nigeria, to design and manage a capacity building intervention.

Description: This capacity building intervention was designed to equip health professionals with the needed skills, tools and techniques to improve health services in local communities through a nine week Fellowship Program, which:

1. Consolidates skills in HIV/AIDS management, and
2. Builds the leadership and management capacity of the participants to respond to changes, leverage local resources, and engage communities in new activities through four major components - classroom activities, community-based assignments, mentoring/peer support mechanism and practical training.

All the teaching tools and techniques were adapted to suit the local experiences and cultural sensitivities.

Lessons learned: Over 19 months, three cohorts totaling 81 health professionals, who provide HIV/AIDS services in 28 facilities, within 25 States, benefited from the Fellowship Program. Data shows that cumulatively, 92% of the health professionals have shared their new knowledge and skills with over 230,000 persons in over 38 rural communities. The reported facility-based outcomes include: 25% increase in the number of clients adhering to the ART protocols; a 50% reduction in client waiting time; 90% of the fellows are able to improve provider/client relationship; while 53% were able to improve client satisfaction through change in policies that are not client focused.

Next steps: The findings show that graduates of the Fellowship Program are better equipped to identify, manage and overcome challenges and to mitigate provision of quality HIV/AIDS services under difficult circumstances.

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MOPE0799
Opportunities and challenges of decentralized HIV and AIDS management through the lens of Zomba District Assembly, Malawi

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Background: In line with paradigmatic shift in the theory and practice of governance since 1980s, centralized development approaches have been replaced by community driven development (CDD). The rationale for this shift is based on the understanding that CDD will lead to sustainable development. It is this understanding that is responsible for widespread decentralization policies promulgated in most of the developing countries. To this end, HIV and AIDS management in most countries, including Malawi, is currently decentralized. CDD is founded on the belief that local people are able to rationally choose their needs and consequently sustain development activities. The social capital literature in particular argues that local communities are able to use their local networks and values in achieving their common good.

Methods: Using Zomba District Assembly, this paper explores the opportunities and challenges of decentralized HIV and AIDS management in Malawi. To respond to this question, both qualitative (structured interviews, focus group discussion, key informants interview) and quantitative (household survey) methods of data collection were employed.

Results: The study findings reveal that decentralized HIV and AIDS management in Malawi faces a number of challenges. First, communities experience increase conflicts as they competing for HIV and AIDS resources. Second, there is lack of coordination leading to inefficiency. Third, there is increased disparity in the allocation of HIV and AIDS resources due to overdependence on donor funds. This results in “technocratic good projects proposal” which is not based on HIV incidences. In addition, communities are highly skilled personnel to implement programmes at grassroots level.

Conclusions: Thus to remain effective, decentralized HIV and AIDS management demands a guiding hand aimed at reducing these friction. This should be built on increased understanding of the problem with decentralized approach.

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MOPE0800
Eliminating harmful traditional practices in Ethiopia: insights from Ethiopia

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Issues: Research to date has not established a firm linkage between harmful traditional practices (HTP) and HIV. However, as many of these traditional practices include the transfer of blood, they carry a significant risk of HIV transmission. To this end, HIV and AIDS policies are often undermined by the beliefs that drive the practices.

Description: In 2006 Concern Ethiopia was using a social capital behaviour change approach called community conversation (CC) as part of their HIV prevention programmes in a rural area. The approach is a method of dialogue that has everyone in the community engaged in examining their and the community norms, values and principles and what effect those have on relationships individuals, families, friends and in particular what effect they have on the HIV epidemic.

Lessons learned: A study undertaken in August 2009 using qualitative methodology showed that harmful traditional practices had been nearly eliminated in the area, with the change being attributed to the programme. FGM, bride inheritance, and early marriage are seen as some of the HTP practices that may increase the risk of HIV transmission. Programmes for the elimination of these HTP are usually undermined by the beliefs that drive the practices.

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MOPE0801
Women with HIV as empowerment process facilitators among their peers

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Issues: Traditionally and unacceptably in concentrated epidemics women with HIV (WH) have few opportunities to access training and education designed, developed and implemented by WH among their peers. Commonly WH attend mixed self-help groups which do not address their specific needs, especially since WH experiences differ widely from other populations affected by HIV.

Description: Planning our Empowerment, an ICH-Mexico project trained 10 positive female leaders as empowerment process facilitators among their peers. A manual was developed and trainedees were provided with tools to manage/facilitate group dynamics on relevant issues: living with HIV, gender, self esteem, sexuality, and stigma and discrimination. Improving facilitation skills was a key component reinforced by successfully planning an effective...
MPOE0802
From investigation to community participation: the HIV infection prevalence study in the transgender population in Lima, Peru, as collaborative work between the organization Red Trans Peru and the Instituto de Estudios en Salud, Sexualidad y Desarrollo Humano (IESSDH)

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Issues: In Peru, studies about the transgender population have been, until now, scarce. This HIV prevalence study in the transgender population, carried out in Lima, was implemented by the IESSDH and the organization Red Trans Peru. We seek to highlight the results of the cooperation between an organization of transgender individuals and an institute of investigation in an epidemiologic study that utilized the methodology of Respondent Driven Sampling.

Description: This pioneering study was planned by IESSDH and Red Trans together. The survey was designed and validated by transgender individuals. Two transgender leaders implemented the survey and a transgender medical technologist collected samples from participants. All were properly trained for the job. The enrollment of 450 participants was achieved thanks to the knowledge that the leaders had about transgender social networks in Lima.

Lessons learned: This experience demonstrated the importance of community participation in this type of study. Thanks to this collaboration, we were able to reach hidden population, which would have been difficult to access by any other means. The survey was culturally appropriate and, because it was implemented by the transgender leaders, the participants felt a greater level of trust. Importantly, individuals from this population have been trained to carry out this type of investigation in any context.

Next steps: It is important to continue training transgender leaders in this type of investigation, so that they can be active participants, including in epidemiologic studies that carried out in the transgender population. All of this will increase their inclusion and empowerment, in addition to guiding states in formulating better public policies for universal access.

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MPOE0803
Improved ART adherence through case management in Ethiopia

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Issues: The Ethiopia HIV/AIDS Care and Support Program (HCSP), initiated in 2007, supports 350 health centers (HCs) to provide comprehensive HIV/ AIDS services. With each HC expected to serve approximately 60,000 people, the reach of the program is around 33 million people, including over 750,000 HIV-infected people. To improve HIV care and treatment, HCSP provided case managers (CM) to each ART HC. The majority are HIV-infected themselves and can act as “expert patients.” They receive a 21-day training before being placed in a community HC, followed by annual 5-day refresher training. CMs support each HIV-infected client, with an emphasis on psychosocial support, HIV treatment adherence, and follow-up within the community.

Description: To determine effectiveness of the CM approach, we conducted a qualitative study on the outcomes of the case management approach through focus group discussions with ART providers, HIV-positive clients, and community volunteers.

Lessons learned: Our results indicate that CM have been effective in key quality of care areas, leading to improved ART uptake and adherence, and a lost-to-follow-up rate of only 7% (compared with a national rate of 23%).

A key contributing factor is their empathy and commitment to ART clients, which fosters mutual trust between them, a shared HIV-positive status, and their experience with managing medication side effects.

Next steps: As access to comprehensive services is improved and the last to follow-up rate decreased significantly by the use of CM, this success is due to the empathetic nature of the CM and a shared HIV status. Mentoring and support of the health center staff and linkages with the community are essential for success of the CM approach.

MPOE0804
Networking for life: health promotion among positive women as a fundamental right. Group "Estrella de Vida" Colectivo Sol. A.C.

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Issues: During the last 4 years the National Network of Women with HIV in Mexico has succeeded in positioning the agenda of women with HIV in relevant decision making spaces at national level. At the same time preparing and training a group of 40 positive women whose networking activities advance peer health promotion among women with HIV as a fundamental right and as a community mobilization tool.

Description: The project has trained 40 women with HIV in group management, peer and outreach education and sexual health promotion. PeerEd teams reach out to women with HIV in health centers and self-help groups focusing messages on the right to health, the need to act collectively in pursuit of good quality services and of improved patient-doctor relations. Women participating in the project reported higher community involvement, improved support in health and social services and in collective issues. Health services reported reduced costs in care due to improved health conditions of positive women patients. By acting as a network and as isolated individuals, women with HIV participate more in prevention and health promotion activities targeting girls and women.

Lessons learned: Peer Health promotion for women with HIV is a powerful tool to help upscale their quality of life and it is better done when women are fully aware that access to health services is a fundamental right they can demand and access through collective organizing and pressure.

Next steps: To generate a new prevention-care model for women with HIV in Clinica Condesa in Mexico City and continue strengthening the network of women with HIV.

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MPOE0805
The impact of social capital on anti-retroviral therapy adherence and HIV prevention behaviors

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Issues: Health services reported reduced costs in care due to improved health conditions of positive women patients. By acting as a network and as isolated individuals, women with HIV participate more in prevention and health promotion activities targeting girls and women.

Lessons learned: Peer Health promotion for women with HIV is a powerful tool to help upscale their quality of life and it is better done when women are fully aware that access to health services is a fundamental right they can demand and access through collective organizing and pressure.

Next steps: To generate a new prevention-care model for women with HIV in Clinica Condesa in Mexico City and continue strengthening the network of women with HIV.

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Background: Social capital (SC) describes an individual’s perceived social resources and has been linked to health outcomes. PLWH worldwide are often marginalized, impoverished, less educated, and socially disconnected. This lack of SC may lead to less participation in public life. The influence of SC on ART adherence, prevention behaviors and HIV disease status is poorly understood. The purpose of our study was to examine the associations between SC, ART adherence, prevention behaviors and HIV disease status in an international sample of PLWH.

Methods: A convenience sample of 432 PLWH were enrolled from HIV clinics and AIDS service organizations in the United States and Canada from August to December 2009. Each participant completed a cross-sectional survey with assessments of demographics, SC, ART adherence, prevention behavior and HIV disease status. SC was assessed with Onyx and Bullen’s Social Capital Scale (2000). Data analyses included descriptive statistics and multivariate regression.

Results: Participants’ mean age was 46.5 years (+/- 8.63). Gender identity was male (71%), female (22%), and transgender (4%). Participants’ race was predominantly African American/Black (45%) or White/Anglo (34%). Total SC was 2.65 (+/-0.49) points (possible range 1 to 4), which is higher than average. SC sub-scales ranged from 2.55 (Trust and Safety) to 3.11 (Diversity and Tolerance). There were no differences in total SC by gender, sex, site, work status or family composition. Total SC varied by race and income level (p< 0.05). Aspects of SC, particularly the value of life and social agency sub-scales, significantly predicted ART adherence and injection drug use (IDU), controlling for demographic and health variables. No relationship between HIV disease status and SC was observed.

Conclusions: SC appears to be associated with higher ART adherence and decreased IDU. Interventions which increase value of life, sense of social agency and total SC are needed to improve health outcomes in PLWH.

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MOPE0806
Taking charge of our own HIV/STD prevention: an empowering community intervention with MSM and transgender persons in Lima, Peru

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Issues: Peru has a concentrated HIV epidemic among MSM and transgender (TG) persons. Despite substantial investment by the Global Fund the epidemic continues, as well as the stigma and discrimination against MSM and TG that affect their health seeking behavior. We designed a community intervention among:

(1) to organize and empower MSM and TG persons as their own HIV/STD prevention agents; and
(2) to fight stigma and discrimination by promoting their acceptance in their community.

Description: In 8 low-income neighborhoods, MSM and TG leaders were recruited and trained by facilitators in HIV prevention, STD/HIV educational skills, peer counseling, leadership, TLGB rights, and organizational skills. Seventeen months after the first 4 weeks, the leaders received financial and technical support to create community centers where they offered HIV/STD prevention activities to their peers and other individuals or organizations within in their community. The leaders were trained to develop a business plan to ensure the sustainability of the centers.

Lessons learned:
- After the 17 months, 7 out of the 8 centers remained working on prevention.
- Several of the centers established links with other institutions in their communities (schools, health centers) as well as with TLGB networks.
- MSM and TG persons were recognized and accepted in their communities as experts in HIV/STD prevention.
- Facilitators were rotated in order to eliminate the dependency of the centers’ leaders on them.

Next steps: For future interventions we recommend:
- A better selection of facilitators with the appropriate profile (drive, motivation).
- To obtain a cohesive commitment for prevention among MSM and TG leaders before starting the community center.
- The sustainability business plan should start shortly after the creation of the centers.

For the sustainability it is important to establish strategic alliances with other similar organizations or networks.

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MOPE0807
Strengthening the community contribution to health systems - the case of autonomous MSM and PLHA service organizations in China

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Issues: CBOS have a critical role to play in enhancing the effectiveness of health system responses to HIV/AIDS. VCT coverage and ART adherence are a case in point. The systems development needs of CBOS providing such enhancements are often overlooked.

Description: With support from USAID and DFID the International HIV/AIDS Alliance in China (IHSAAC) has provided CBOS with a range of skills in community development, clinic and hospital-based services. In 2009 CGCC received over 1,000 MSM in Chengdu with VCT; accounting for 88% of the number of identified MSM getting tested and 87% of those testing positive. ACC operates a healthcare facility-based peer ART adherence support service across 4 provinces. Among 2037 on ART receiving support in 2009 in 3 sites in Guanxi province they recorded loss-to-follow-up rates less than 1% (16 persons, exclusive of 119 deaths and 48 discontinuing for medical reasons.)

To help develop these groups’ contribution to the health system Alliance has provided organizational development support on financial management systems, M&E systems, programme planning and organizational strategy development. This support is essential to sustain these interventions and help them go to scale.

Lessons learned: In the Chinese context PLHA and MSM CBOS can have significant impacts to develop and govern their organizations independently if they work alongside public health authorities to a public health agenda. Collaboration (government/CBO) service delivery models enhance government support for CBOS involvement which in turn helps tackle low demand for clinic-based VCT and poor adherence to ART.

Next steps: Sustainability is a critical issue as international funding for HIV programmes in China decreases. In-country funding for local CBOS is essential to build on these successes.

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MOPE0808
Building a palliative care program in Ethiopia: the impact on HIV and AIDS patients and their families

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Issues: Community-based palliative care programs within a continuum of care needs to widely available. Family planning and ART support needs to be an integral part of palliative care in the community. Existing community structures (idris) can be used to provide sustainable support for community interventions.

Description: Family Health International Ethiopia, in collaboration with government, NGOs, and community organizations, implements home- and community-based palliative care within the palliative care continuum in 14 major cities.

The program relies on traditional burial societies (idris) to provide sustainable support for community-based interventions, closely linked to local health facilities. HCBC takes a comprehensive and family-based approach in order to assess and address broader needs, including family planning. Community-based organizations play a central role by leveraging support from local community and other similar organizations or networks.

Next steps and recommendations: Community-based palliative care programs should be incorporated into the national continuum of care package.

Prevention for positives programs strengthened

Strengthen programs targeting women’s skills

Increase capacity building for local CBOS

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MOPE0809
Community copying strategies to HIV and AIDS in Homa Bay district, Kenya

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Background: Most communities have developed a wide range of complex and innovative strategies to survive the adverse impacts of HIV. They have spontaneously joined to support and assist families and children affected by HIV and AIDS. These strategies may be the most cost-effective and far-reaching. This study aimed at identifying HIV and AIDS coping strategies among communities and to determine factors that hinder or enhance these strategies.

Methods: A cross-sectional survey was undertaken and data collected from 302 respondents, a section of leaders, and small groups of community members. Interviews schedules, focus group discussions (FGDs), and observation checklists used. The Divisions were divided into four clusters, and Sub-localizations or Locations selected by simple random sampling; households selected by systematic random sampling. Data gathered summarized using EpInfo; analyzed and presented using SPSS and Microsoft Excel in that order.

Results: Copying strategies adopted were: treatment and care of the sick, orphans support, social groups, Income Generating Activities (IGAs), protection of property rights, changes in cultural practices, voluntary labour services and uptake of VCT services. Treatment and care of the sick was widespread. Large proportion of respondents 248(82%) had care for relatives with pro-longed illness. Orphans were many in the community, a very large proportion of respondents 284(94%) had an orphan related to them. Programme activities of external agencies included: advocacy, infrastructure improvement, and capacity building through training. Support to community initiatives and infrastructure improvement were ranked first 92(37.5%) and second 83(33.5%) respectively by the respondents.

Conclusions: Expansion or strengthening community home-based care services for orphans addressed by the government and partners through financial support to communities or households fostering orphans as opposed to setting up orphanages. These findings will inform policy on mitigation against socio-economic impact of HIV and AIDS in Kenya.

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MPOE0810 Qualitative results from the Health in Middlesen Men Matters (HiMMM) project
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Issues: In 2006, the AIDS Committee of London, Ontario, Canada (ACOL) held a LBGT2SQ Health Forum to initiate discussion around local health con-
cerns. Three topics emerged: homophobia (internal/external); isolation and 
sexual orientation diversity in local service provision.

Next steps: Findings will formulate a quantitative survey delivered through respondent-driven sampling. Results from all phases of the HiMMM Project will guide local prevention efforts and be utilized to press for greater focus on sexual orientation diversity in local service provision.

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MPOE0811 Buddies anduddies: how social capital mediates migrants’ HIV risk at destination
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Background: Social capital framework was employed to try to understand how migration affects migrants’ HIV risk at destination place.

Methods: The study was undertaken among Paggasian migrants of age 18 and above in Mumbai and Ahmedabad to collect data from 1998 migrants through survey data and from 93 migrants through qualitative methods from January to June 2007.

Results: The centre specific organization of social capital in the two study sites gave rise to what could be called a ‘buddy culture’ in Ahmedabad and a ‘daddy culture’ in Mumbai. Most migrants in Ahmedabad were young and un-married and the loss of family and community ties due to migration was compen-
sated by forming friend-based networks; thus engendering a buddy culture. On the other hand, migration happened on the line of family, kinship and caste. In many cases, a son or younger brother joined his father or elder brother. In Mumbai, people lived with their relatives, father or brother. There were always some known senior migrants around either as a roommate or as an employer/contractor. Social capital, in most domain and component forms, was associated with HIV risk measures but owing to the difference in content and quality of social capital among migrants in Mumbai and Ahmed-
abad, the relationship was complex. High levels of overall social capital, bridg-
ing social capital and components of bridging social capital were protective of HIV risk in both the cities while high level of linking social capital was associ-
ated with lower HIV risk in Mumbai and higher HIV risk in Ahmedabad.

Conclusions: This study, for the first time in epidemiological research, was able to reveal the mediating effect of social capital on migrants’ differential HIV risk at the domain levels. Further research in different epidemiologic set-
tings is recommended to fully understand the migration and HIV dynamics.

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MPOE0812 APAAAs integrated model of addressing HIV/AIDS issues in African communities in Toronto, ON, Canada
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Issues: Africans account for a disproportionate number of cases of HIV/AIDS in Canada. Africans in Partnership against AIDS (APAA) is involved in address-
ing this problem in this population. This Diasporic population is a racialized minority population with little access to programs and services that are sensi-
tive to their cultures and languages.

Description: APAA has developed a holistic model of service delivery based on blending traditional approaches to service and programs (e.g., outreach, prevention and education) with cultural and linguistic competence. Strategic linkages were made with local community leaders who were significantly connected to the target populations. A significant stakeholder and key partner were Faith Based Organizations (FBOs), significant ones for the target popula-
tion being the Muslim of the Muslim Community (MOC), Education 
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Lessons learned: Need for an adaptive, holistic and integrated approach in dealing with HIV/AIDS in African communities.
1. Use of target community languages necessary for accessible services and resources.
2. Use of staff/providers that identify with the target population as program coordinators.
3. Engagement of all stakeholders of the target community in ASO programming: Some examples include Youth (Youth Project), PHAs [African Speakers Bureau], Faith Based Organization representatives [Muslim & Christian Projects], Families and LGBT representation. Link to larger community: through mobilization and engagement of Volunteer Programming.

Next steps: The language base needs to be widened and more resources developed in those languages.
2. More cultural associations should be engaged so that they can further influence program and service delivery in more culturally specific ways.
3. The APAA model of addressing HIV/AIDS in African communities in Toronto needs to be evaluated continuously in qualitative as well as a quantitative ways.

Child care, infant feeding

MPOE0813 Child care, infant feeding
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Background: Infant feeding practices, particularly mixed feeding, contrib-
utes to mother-to-child transmission of HIV. The aim of this study was to as-
sess knowledge, infant feeding practices and attitudes of HIV-positive women with infants between ages 3 to 6 months who have attended prevention of 
mother-to-child transmission (PTMCT) of HIV services at Gert Sibande.

Methods: A cross-sectional study was conducted on 815 HIV-positive moth-
ers at postnatal clinics of Gert Sibande. Trained field workers at health facili-
ties collected data, using structured questionnaires. HIV infected women who 
were 18 years of age and older with an infant of 3-6 months were eligible for 
the study.

Results: The mean age of participants was 27.7 years (SD 6.4). Seventy-one percent knew that HIV could be transmitted during pregnancy and 78.7% knew it could be transmitted during delivery. Seventy-eight percent agreed that HIV could be transmitted by breast feeding. Half (59.6%) were exclusive-
ly formula feeding, 35.6% breastfed exclusively and 12.4% reported mixed feeding. In multivariate analysis, having a vaginal delivery, fewer antenatal 
care visits, infant hospital admissions, male involvement and currently preg-
nant were associated with mixed feeding. Being older, delivering a baby at a health care facility and knowing the HIV status of the infant, higher knowledge on HIV transmission through breast feeding, and being on ART were associ-
ated with formula feeding.

Conclusions: The PTMCT programme is having a positive impact in dissemi-
nating information to women. A significant percentage of mothers opted to breastfeed. Infant testing, follow up, social and emotional support needs at-
tended.

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MPOE0814 Factors associated with utilization of pediatric HIV services in Kalsiio Health Care Centre
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Background: This study was conducted at Kalisizo Health Care Centre in 
Kisii district. It aimed at assessing the factors associated with the utilization of pediatric HIV services. Kalisizo Health Care Centre is supported by AMF 
Uganda Cares and offers comprehensive HIV care. It serves clients from Rakai 
and Masaka districts.

Methods: This was a descriptive cross sectional study where both qualitative and quantitative methods of data collection were employed. It involved a sample size of 70 caretakers of HIV infected children who were selected us-
ing simple random sampling and 4 health workers selected purposively. The 
data was collected using questionnaires, focus group discussion and interview.

Results: The study revealed that the least group of caretakers 7.0% to utili-
ze pediatric HIV services were the grandmothers. Of these, 4.5% were 
below the age and 2.5 were in the group of young age. The female were the majority caretakers, 65.0% to utilize Paediatric HIV services. The study further revealed that the largest number of caretakers, 54.0% live at distance of more than 10km from
the hospital and 50.0% use vehicles/ taxi as a means of transport to hospital. The study also showed that majority of caretakers 68.0% were not knowledgable about HTLV/AIDS. HIV in children is fully preventable with PMTCT interventions. However, postnatral mother-to-child transmission may be occurring in up to 50% of national cases, signaling a need for new approaches on infant feeding.

Methods: Qualitative research methods encompassed: semi-structured interviews with 83 women; 37 caregivers of children with HIV; 19 health personnel. Research was undertaken in four public health facilities in one rural and one urban location. Study approval was granted by the provincial health departments and Witwatersrand University.

Results: Across the four facilities, one of the weakest aspects of the PMTCT programme was in guiding mothers on infant feeding. Women struggled to make feeding choices that matched their socio-economic contexts and acceptability, while some received poor counselling and support on infant feeding options. Health staff did not provide 'choices'. Rather, they steered women towards their own preference, resulting in over 95% of women in one facility choosing to formula feed when they had no access to safe water. In the other rural facilities, often, no counselling was received at all.

Conclusions: National guidelines on infant feeding are overly complex, with health personnel failing to provide sufficient information and support to mothers across facilities. The practice of mixed feeding reflects the poor counselling received by women during antenatal care and labour, and, consequently, a poor understanding of feeding options and risks. Recommendations encompass: quality (simplified yet rigorous, regular) re-training of health personnel; and reviews of patients' files. Research was undertaken in four rural and urban settings in South Africa, University of the Witwatersrand, Johannesburg, South Africa.

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Background: In South Africa, development gains for women and children won over two decades are now being reversed, largely due to HIV/AIDS. HIV in children is fully preventable with PMTCT interventions. However, postnatal mother-to-child transmission may be occurring in up to 50% of national cases, signaling a need for new approaches on infant feeding.

Methods: Qualitative research methods encompassed: semi-structured interviews with 83 women; 37 caregivers of children with HIV; 19 health personnel. Research was undertaken in four public health facilities in one rural and one urban location. Study approval was granted by the provincial health departments and Witwatersrand University.

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Conclusions: National guidelines on infant feeding are overly complex, with health personnel failing to provide sufficient information and support to mothers across facilities. The practice of mixed feeding reflects the poor counselling received by women during antenatal care and labour, and, consequently, a poor understanding of feeding options and risks. Recommendations encompass: quality (simplified yet rigorous, regular) re-training of health personnel on infant feeding; checklists; public health messaging in facilities and communities; management taking responsibility for ensuring supervision and oversight; and performance review.

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ART adherence among HIV+ children (orphans) under the care of ‘illiterate’, old grandparents - Taso Jinja

S. Khanakwa1, C. Luzzo2, M. Ngolo1, J. Birungi2
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Issues: The introduction of free Anti Retro Viral Therapy (ART) has increased ART uptake in TASO. In June 2009, a cumulative number of 3200 TASO Jinja clients was on ART, among these 101 were children below 12 years of which 62 are orphans under the care of their grandparents, most of whom are illiterate and old. TASO, one of the key partners offering HIV/AIDS care and support in Uganda, has scaled ART to her clients with a proportion of 10% of the total number of children. The pronounced effect. Secondary analysis from one trial of early cessation of breastfeeding avoidance reduces HIV transmission, HIV-free survival is not increased by this intervention. A trial of early cessation of breastfeeding revealed similar results of higher mortality and no benefit for HIV-free survival. In comparison with historical controls, cessation among six months was associated with increased mortality (two studies stopped early due to the pronounced effect). Secondary analysis from one trial of early cessation revealed a three-fold increase in risk of death compared to breastfeeding to >18 months.

Conclusions: While avoidance and early cessation of breastfeeding reduce HIV transmission, programmatic and clinical trial evidence suggests that they also increase infant morbidity and mortality and thus providing no net benefit for HIV-free survival. These data were useful in guiding new WHO guidelines that recommend continued breastfeeding for all HIV-positive mothers to 12 months in combination with HAART if CD4 counts < 350 cells/mm3 and HAART or infant prophylaxis if CD4 counts are higher. The magnitude of increase in mortality associated with avoidance of breastfeeding indicate that continued breastfeeding is safer even when HAART is unavailable.

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MOPE0817
Improving child health and HIV-free survival: a review of current research on risks and benefits of infant feeding options for HIV-positive moms

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Background: International guidelines for uninfected populations have recommended exclusive breastfeeding to six months with continued breastfeeding to two years. Yet over the past ten years, many HIV-positive mothers have avoided breastfeeding or shortened their usual duration. We reviewed evidence concerning the effect of breastfeeding avoidance and early cessation on infant mortality and HIV-free survival in developing countries.

Methods: We conducted a literature review by performing PubMed and MEDLINE searches and reviewing citations in publications and international conference abstracts. Search terms included: infant feeding and HIV, exclusive breastfeeding, and formula feeding.

Results: Evidence from several sources indicates that breastfeeding avoidance or cessation increases infant mortality and HIV-free survival without benefits for HIV-free survival. Increases in mortality range from six-fold increases in program settings to two-fold increases in clinical trials. Clinical trials indicate that although breastfeeding avoidance reduces HIV transmission, HIV-free survival is not increased by this intervention. A trial of early cessation of breastfeeding revealed similar results of higher mortality and no benefit for HIV-free survival. In comparison with historical controls, cessation among six months was associated with increased mortality (two studies stopped early due to the pronounced effect). Secondary analysis from one trial of early cessation revealed a three-fold increase in risk of death compared to breastfeeding to >18 months.

Conclusions: While avoidance and early cessation of breastfeeding reduce HIV transmission, programmatic and clinical trial evidence suggests that they also increase infant morbidity and mortality and thus providing no net benefit for HIV-free survival. These data were useful in guiding new WHO guidelines that recommend continued breastfeeding for all HIV-positive mothers to 12 months in combination with HAART if CD4 counts < 350 cells/mm3 and HAART or infant prophylaxis if CD4 counts are higher. The magnitude of increase in mortality associated with avoidance of breastfeeding indicate that continued breastfeeding is safer even when HAART is unavailable.

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Other behavioural and structural interventions

MOPE0816
ART uptake among HIV+ children (orphans) under the care of ‘illiterate’, old grandparents - Taso Jinja

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Issues: The introduction of free Anti Retro Viral Therapy (ART) has increased ART uptake in TASO. In June 2009, a cumulative number of 3200 TASO Jinja clients was on ART, among these 101 were children below 12 years of which 62 are orphans under the care of their grandparents, most of whom are illiterate and old. TASO, one of the key partners offering HIV/AIDS care and support in Uganda, has scaled ART to her clients with a proportion of 10% of the total number of children. The pronounced effect. Secondary analysis from one trial of early cessation of breastfeeding avoidance reduces HIV transmission, HIV-free survival is not increased by this intervention. A trial of early cessation of breastfeeding revealed similar results of higher mortality and no benefit for HIV-free survival. In comparison with historical controls, cessation among six months was associated with increased mortality (two studies stopped early due to the pronounced effect). Secondary analysis from one trial of early cessation revealed a three-fold increase in risk of death compared to breastfeeding to >18 months.

Conclusions: While avoidance and early cessation of breastfeeding reduce HIV transmission, programmatic and clinical trial evidence suggests that they also increase infant morbidity and mortality and thus providing no net benefit for HIV-free survival. These data were useful in guiding new WHO guidelines that recommend continued breastfeeding for all HIV-positive mothers to 12 months in combination with HAART if CD4 counts < 350 cells/mm3 and HAART or infant prophylaxis if CD4 counts are higher. The magnitude of increase in mortality associated with avoidance of breastfeeding indicate that continued breastfeeding is safer even when HAART is unavailable.

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MOPE0818
Participation diversity in HIV prevention studies: an urgent need among most at risk populations in Malawi

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Background: Research and media reports show that there about 10,000 men who sex with men (MSM) in Malawi. HIV prevalence amongst MSM is higher than the generalized rate of 12%. Studies have demonstrated a high prevalece of infection among men who have sex with men (MSM) being 21%. While a number of studies have examined the acceptability of HIV prevention research such as microbicides and HIV Vaccine clinical trials among heterosexuals, little has been done on MSM in Africa. There's also high level of stigma against homosexuality in Malawi.

Methods: 300 MSM were included in the study from December 2008 to October 2009. 180were interviewed using focus group discussion, 120 responded to a questionnaire loaded into a Personal Data Assistant (PDA) to assess knowledge on HIV vaccines and microbicides trials. A Geographical Position System was used to locate geographical location of the respondents.

Results: The response rate on sample was (98%; median age 25 years) completed the study questionnaire.80% were not aware of any clinical trial going on. When informed of the ongoing research, 67% of MSM indicated willingness to participate in microbicides and HIV Vaccine research. A total of 93% indicated willingness to disclose that they are MSM to a health professional in order to obtain the vaccine and microbicides.

Conclusions: Diversifying participation in HIV prevention clinical trials to all most at risk populations would help accelerate equitable and fair results of HIV prevention products among high risk populations in HIV and AIDS. MSM in Malawi appear willing and interested in participating in HIV prevention studies, despite high levels of stigma prevailing.

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MOPE0819

Substance abuse prevention among youth in Russia: an effective and easily replicable model

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Issues: In Russia, the HIV epidemic is largely driven by injecting drug use. Russian youth begin experimenting with drugs between ages 12-14 and inject within 1-14 years. Interventions working with youth lack modern drug and HIV prevention approaches.

Description: Introduced in 2007, the “Youth Center” (YC) approach is a modular, youth-focused HIV and Substance Abuse Prevention (SAP) program aimed at reducing drug use and HIV transmission. It includes provision of positive leisure opportunities to attract youth to the program, accurate HIV and drug prevention information, social skills training for youth, family therapy, and referrals to partner medical, psychological, and social services. Educators and health providers receive intensive, multi-session training, to strengthen knowledge and skills in HIV/SAP, stigma reduction, and communication skills with teenagers and parents. YC has been expanded to five cities in four regions and is tailored to varied state educational institutions and municipal youth medical, leisure, sports, and social centers. YC receives funding from public, private, and international sources. From 2007 to 2009, over 12,000 youth received HIV/SAP training and consultations, and over 1,200 youth-focused specialists were trained in program curricula.

Lessons learned: YC model is proving effective in linking leisure, education, healthcare, social, and law enforcement institutions that are vital to addressing HIV prevention among at-risk youth. Progressive training for professionals is essential to reduce stigma and ensure delivery of accurate information and non-based services. Youth are open to behavior change messages delivered in an interactive, respectful, and non-didactic manner. The model is easy to replicate, can be tailored and introduced at low cost into any youth-oriented program that can be based on existing municipal and community facilities.

Next steps: Existing YC sites can serve as resource centers to share experience, provide training programs for professionals, and assistance for replication of the model.

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MOPE0820

An exploration of the association between sexually explicit media and sexual risk-taking by U.S. men who have sex with men


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Background: U.S. men who have sex with men (MSM) are high consumers of sexually explicit media (SEM), yet almost no studies of gay SEM have been published. This presentation reports qualitative data about SEM’s contribution to MSM’s sexual risk.

Methods: Using banner ads, MSM were recruited from gay websites to participate in one of twelve online synchronous focus groups and an asynchronous moderated discussion forum. Participants were male 18+, a US resident, and reported at least one male sexual partner. After completing an eligibility questionnaire and consenting, participants were divided into focus groups based on their SEM consumption and whether or not their consumption was problematic. Content analysis was conducted in NVivo.

Results: Sexual Script Theory provided a useful analytic framework. The prevalence and accessibility of SEM contributed to a cultural scenario that normalizes men using SEM to learn about new sexual acts or to facilitate sexual fantasies or escapism, often while masturbating. Intra-psychical SEM explored scripts that were activated by either modifying their intrapsychic script or by avoiding the behavior in the future. Participants using SEM for fantasy or escapism were less likely to report cognitive dissonance. These men used SEM to virtually exact sexual scripts –的行为 of the actors (those that they did not intend to do in real life).

Conclusions: This study identifies potential causal pathways between SEM consumption and sexual beliefs and behaviors that interventionists might use to identify points where new interventions could be developed. More research is needed to validate the proposed pathways before developing SEM-based intervention programs.

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MOPE0821

A role for practice (student) teacher programs in revitalizing HIV/AIDS information and action in South Africa: a university of Swaziland student-driven initiative

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Issues: Keeping HIV/AIDS information and activities available and relevant is a significant challenge across Swaziland’s schools. Resources are limited and students can benefit from regular revitalization of learning and action. Each year University of Swaziland education students are placed in schools for teaching experience, and they encounter the profound impact of HIV/AIDS on learners and schools. The practice teacher program is an established structure with renewed annual participation at the university that can facilitate HIV/AIDS content and response in schools.

Description: This education and public health/sociology initiative collaborates with university students to explore potential of practice teachers to improve HIV/AIDS information and action in schools. Prior to placements, a cohort of education students (15) participated in individual and group sessions exploring perceptions of potential impact of HIV/AIDS in placement schools; second, contextual local circumstances and actual encounters in placement schools identified focus groups on related experiences, successes and challenges (3-4 focus groups including 100-120 students). All students employed ways to assist practice teachers engage HIV/AIDS issues and promote response.

Lessons learned: Based on field experience, students report the practice teacher program can help relay needed information and support action. The program can provide ongoing discussion across student class years of issues and approaches in specific schools July 2006, generally. It can link to partners to facilitate distribution of current and effective material. Student teachers may have unique opportunities to facilitate HIV/AIDS communication with learners as well as with teachers, administrators. Students have many responsibilities in placement, and an HIV/AIDS role should and can complement and support those. The model could be readily employed elsewhere.

Next steps: Materials and training sessions using student recommendations have been developed with students and partners for the next cohort of practice teachers. These interventions will be evaluated to further guide program development.

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MOPE0822

Seeking high retention subjects in clinical trials: lessons learnt at UNC project, Lilongwe, Malawi


UNC Project, Research, Lilongwe, Malawi

Background: UNC Project is a clinical research site which has been conducting HIV prevention and treatment studies since 1999 for NIH sponsored Networks (including HPTN, ACTG, IMPAACT, and CHAVI). Retention in clinical trials is critical for successful research and methods for tracing subjects are incorporated into retention strategies. We sought to determine the reasons and challenges faced when tracing research subjects in the Lilongwe community.

Methods: Nurses or VCT/psychosocial counselors from the UNC Project community departments are informed by study teams when study participants are lost to followup. Tracing may include phone calls or visits to the home or workplace according to clients’ instructions. From 2005 to 2009, 816 tracing attempts were conducted.

Results: From July 2005 to July 2009, 816 tracings were attempted for 596 clients. Reasons for the 816 tracings included missed scheduled visits (295, 36.2%), and service delivery (521, 63.8%). The service delivery included: abnormal laboratory results (170, 20.8%), providing treatment (35, 4.3%), and missing study product (25, 3.1%), specimen or data collection (61, 7.5%), either directly or indirectly. The 816 tracing attempts were successful i.e. subjects were found. Challenges faced by tracers included poor locator maps leading to unsuccessful tracings, failure of clients to disclose their study participation to family members, and concerns over privacy due to the use of an identify project vehicle.

Conclusion: Tracing is an effective means of retaining clients in research trials but can also function to improve clinical care and be used as a recruitment strategy.

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MOPE0823


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Issues: This paper will trace the history of AIDS denialism in South Africa in order to analyze the social and political impact of this ideology on infected and affected communities. While a growing body of literature has described the ideology and political dynamics of AIDS denialism, these analyses have not addressed the continuing effects of this period on communities with high rates of infection.

Description: After offering a brief historical overview of the political contestations that marked the 1998-2008 period, this paper will analyze emerging trends in South African AIDS politics. Among the topics that will be covered are the growth of female leadership in social movements organizing for the right to AIDS treatment, the role of state-aligned non-governmental organizations in the politics of AIDS denialism, and the impact of new African National Congress (ANC) leadership on South Africa’s AIDS policy figure most prominently.

Lessons learned: A significant conclusion reached in this research is that new female leadership is emerging within the ANC in response to an AIDS pandemic, and the impact of new non-governmental organizations that are determinant of AIDS politics in South Africa. However this analysis also cautions that while AIDS policy has taken a decisive turn towards orthodoxy since the ANC’s ascension to power in 1994, the long-lasting impact of AIDS denialism will be an obfuscating effect on scientific knowledge and on the historically underserved communities that bear the burden of infection.
Next steps: In order to counteract the legacy of AIDS denialism, education-based prevention efforts in South Africa’s areas of highest infection, peri-urban and rural areas, must be continued and reinterupted. However, we believe that AIDS denialism espoused an anti-Western and anti-scientific position, the more the better. This denialism has been driven to itself by international donor programs may consider working closely with non-governmental organizations with established roots in communities facing high rates of HIV prevalence.

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MOPE824
HIV prevention challenges in Zambian prisons
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Issues: In the Zambian Prisons, HIV/AIDS exacerbates existing problems and creates new ones, yet a real potential to change this situation exists. There is untapped potential to reach prison populations with HIV services. Prison communities are transitional. The people most likely to be in prison are also among those most likely to contract HIV. There are numerous high-risk situations in prison that can transmit HIV, including sexual assault, unprotected sexual encounters between men, and the use of contaminated cutting instruments.

Description: Support to the HIV/AIDS Response (SHARe) project works with the Zambian Prison Service to address HIV/AIDS among inmates and staff. SHARe started by working with management to help them understand the magnitude of the problem of HIV/AIDS within the prison for an HIV intervention. SHARe also coordinated the Prison HIV/AIDS Advisory Committee that mobilizes resources to help the service coordinate the HIV/AIDS response within Zambian prisons. Staff, spouses and inmates were trained as peer educators and change agents. This approach: Increased inmates’ access to HIV/AIDS information; Facilitated the formation of HIV support groups within prisons; Established an HIV/AIDS secretariat to coordinate the program; Supported the development of Strategic and Operational HIV/AIDS Plans in the prisons. Created a referral system for inmates with HIV.

Lessons learned: Next steps: A prison audit, and an HIV/Syphilis Seroprevalence and Behavioral Survey in Zambian Prisons has been planned, and the results will contribute to planning and resource allocation decisions. A comprehensive approach to dealing with HIV/AIDS in prisons is needed. HIV/AIDS stigma in prison is not just about infection but also the stigma of the disease. The results will contribute to planning and resource allocation decisions. It is important to make of the patient an active individual, independent and committed with his treatment to see results. Family and social networks are necessary if the patient needs support.

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MOPE825
Implementation of routine rapid HIV testing within the US Department of Veterans Affairs healthcare system
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Background: Current HIV testing methods can be ineffective or inconvenient for patients, do not return for results. HIV rapid testing (RT) provides accurate results in 20 minutes. Through a randomized controlled trial we found that nurse-initiated HIV rapid testing (RT) is more acceptable to patients than current methods and increases receipt of test results.

Methods: translating research findings into sustainable practice poses widely recognized implementation challenges. NRT was implemented at two medical centers (VAMCs) within the VA Greater Los Angeles Healthcare System (GLA). Formative and process evaluations, to ascertain effectiveness, were conducted. Staff at 2 VAMCs were trained to administer RT. Prior to implementation at site 1, a formative evaluation was conducted. At site 2, we conducted a process evaluation of ongoing activities. Employing snowball sampling, key informant interviews were conducted for both evaluations with 9 manager and 24 front-line practitioners interviewed. Content and thematic analysis of detailed field notes was conducted.

Results: We identified five key aspects that impacted the implementation of NRT at each site: 1) Importance of HIV testing; 2) Implementation needs; 3) Barriers to NRT; 4) Facilitators to NRT; and 5) Clin/Clin/Staff appropriateness for NRT. Barriers included: clinical workflow/staffing as insufficient for uptake of routine use; lack of adherence to consent process; lack of concern with perceived roles/responsibilities; delay in including NRT in nursing scope of practice; blood draw preference. Facilitators included: patient education activities/publicity; local champions. Findings indicate concerns regarding training and increased NRT into workflow. Process findings include 1) training concerns could be alleviated by upskilling/staffing; 2) a training curriculum was developed and implemented 3) MNTs intervened to facilitate uptake.

Conclusions: Implementing rapid HIV testing in a home-based setting is less favorable for consistent use of condoms. The majority of FSWs who live in villages (46.2% of sample), work in home based settings. The 84.7% of these FSWs reported consistent condom use with clients. This suggests that the home based settings is less favourable for consistent use of condoms. Living and work environment will have major influence on FSWs behaviour. Identifying those environmental factors, that act as barrier to safe sex behaviour is essential to work out the specific strategies to create safe environment and reduce FSWs risk for acquiring HIV. Since individual's behaviour is influenced by multiple factors, the HIV prevention efforts look beyond the behaviour change approach.

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MOPE826
Obstacles in adherence: how to deal with it: a prospective study in Argentina
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Background: With the advent of new treatments options, life expectancy in HIV infected patients has improved dramatically. However, many problems with the acceptance of and adherence to these treatments and impacts on the progression of the disease and mortality have been largely described before. An interdisciplinary approach to the patient and their caregivers is required to improve adherence, defined as a favorable attitude towards his treatment and follow up, with the patient as protagonist.

Methods: A prospective study has been conducted between July 2008 and december 2009 with the objective of identifying the difficulties with the treatment and deciding in order to overcome the obstacles. Seventy four HIV infected patients under HAART, with clinical charts at the hospital, were included in this study. Persistence to treatment problems were selected by the patients. We worked with individual opened interviews to detect the main and secondary problems associated with the treatment adherence a designated day of the week. If necessary, social networks interventions were planned.

Results: Fifty seven patients were referred because of conduct disorders (77%) and seventeen because of addictions. We detected denial of the infection to be the main treatment adherence problem: 39.2% (family relational problems: 21.6% and addiction: 14.9%). The secondary problems were related with family relational problems (41.4%), unemployment (11.4%) and organic deficiencies (11.4%). Interventions were adapted to the patient's needs giving special attention to the obstacles encountered in the follow-up. We analyzed the impact of the intervention with a final psychological diagnosis and virological results.

Conclusions: We have observed an improvement on the patient's adherence pattern. It is important to make of the patient an active individual, independent and committed with his treatment to see results. Family and social networks are necessary if the patient needs support.

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MOPE827
Condom use among rural females sex workers in different sex work settings in South India
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Background: The rural based "devadasi" sex work in the northern region of Karnataka state is socially accepted and is highly embedded in different sex work environments. One of the key objectives of "Payana" project is to understand the HIV risk and vulnerability associated with FSWs migration.

Methods: A cohort of 1564 FSWs, including 645 migrants 919 non-migrants from North Karnataka has been recently interviewed and interviewed through a baseline and follow-up interviews. The data was collected between January 2008 and December 2009 and analysed by using SPSS.

Results: The majority of FSWs who live in villages (46.2% of sample), work in home based settings. The 84.7% of these FSWs reported consistent condom use with clients. These FSWs who travel outside the state (41.2%) work predominantly in brothel and follow-up settings reported 99% of condom use with clients. This suggests that the home based settings is less favourable for consistent use of condoms.

Conclusions: Living and work environment will have major influence on FSWs behaviour. Identifying those environmental factors, that act as barrier to safe sex behaviour is essential to work out the specific strategies to create safe environment and reduce FSWs risk for acquiring HIV. Since individual's behaviour is influenced by multiple factors, the HIV prevention efforts look beyond the behaviour change approach.

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MOPE828
Successful demonstration of behavioral activation therapy and risk reduction counseling for MSM with crystal methamphetamine abuse at risk for HIV infection
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Background: Men-who-have-sex-with-men (MSM) represented 61% of incident HIV-infections diagnosed in the United States in 2007. The prevalence of crystal-methamphetamine ("meth") use among MSM has been shown to have increased 20-times that of the general population, with an estimated 10-20% of MSM having used meth during sex in the past three months. Meth abuse/dependence is a prevalent and treatment-resistant problem in MSM, and is high-
Lessons learned: The Enhance Link multisite evaluation has enrolled 564 individuals. Approximately 65% are male, 32% female, and 3% transgender; 30% are African American, 21% Hispanic/Latino, and 17% are African American or Hispanic/Latino. The average age was 37 years (SD=11.4). HIV seropositivity was 30% at entry. Participants represented a mean of 31.4 years of HIV infection lifetime; 45% were diagnosed with HIV for the first time while incarcerated. They all had received at least one prior HCT. Approximately 11% (n=23) were reincarcerated during this period. At 30 days, 74% were stably housed. Initial contacts to community HIV providers were made for 82% (n=170) of released participants. Further, 55% of releases attended their first appointment with case managers. Early findings demonstrated the feasibility of HIV screening and linkage programs in jail settings.

Next steps: Enhance Link continues to evaluate HCT testing, linkages, and service utilization as well as clients’ clinical HIV outcomes and general health status. Final results will be disseminated to correctional administrators, HIV policy makers, and broader public health stakeholders to help identify and promote best practices in linking jail-based populations to HIV care.

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MOPEO831
Increasing uptake of HIV counselling and testing (HCT) among men who have sex with men in Bangkok through service quality improvement

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Issues: HIV prevalence is 31% among MSM in Bangkok yet less than one-third of men who have sex with men (MSM) have been tested in the previous year. A quality improvement project was launched to identify barriers and increase uptake of HCT at two clinics, Bangkok Cross Anonymous Clinic and the Bangkok Metropolitan Administration 28 clinic.

Description: A baseline assessment of barriers to uptake was done using community surveys (n=35), key informant interviews (n=17), six focus group discussions, four quality assurance checklists, facility surveys, and client satisfaction questionnaires (n=59). Interventions addressing identified barriers were implemented: packaging of same-day HIV testing with general health services, MSM sensitivity and awareness training, training on MSM health and psycho-social issues, and the development and implementation of a phased communication strategy. A follow-up assessment including community surveys (n=161) and facility visits (n=33) was conducted. Two quality assurance checklists, and client satisfaction surveys (n=106) was carried out. Conclusion: Client satisfaction surveys showed improvements with increased comfort discussing same sex relations with counselors and counselors self-reported feeling comfortable discussing same sex issues. Observations of counselors and client satisfaction surveys revealed counselors were better able to provide risk reduction and psychosocial support to MSM. A third of clients used package services. The community survey indicated 73% of respondents were exposed to components of the communication efforts but word-of-mouth was still a significant mode of sharing information on services. Uptake increased compared to the pre-intervention period.

Lessons learned: Data collection approaches including the target popula- tion and service providers informs development of feasible, comprehensive, and appropriate approaches. Targeted, phased service promotion strategies including MSM sensitization for providers and public outreach efforts were implemented. Community support for HIV testing and prevention efforts was increased and for impact mitigation, yet attendance patterns across primary schools in Swaziland suffer from high repetition and drop-out rates. In a country experiencing chronic poverty, food insecurity and the world’s worst HIV epidemic, the barriers to education must be understood. We explore monetary and non- monetary factors driving absenteeism, grade repetition and drop-out amongst primary school students, and apply a gendered-lens to the analysis given the high HIV serorelevance among young pregnant females.

Methods: A quantitative survey was conducted with 527 students from 16 schools across the country, with females equally represented (n=264). Semi-structured interviews with teachers and headmasters, and focus group discussions with parents-teacher associations supplemented quantitative data. A qualitative study was conducted with 527 students from 16 schools across the country, with females equally represented (n=264). Semi-structured interviews with teachers and headmasters, and focus group discussions with parents-teacher associations supplemented quantitative data. A qualitative study was conducted with 527 students from 16 schools across the country, with females equally represented (n=264). Semi-structured interviews with teachers and headmasters, and focus group discussions with parents-teacher associations supplemented quantitative data.

Results: A quarter of respondents expressed themselves as feeling non-existent. Approximately 25% of girls had missed at least one third of classes due to illness. Overall, 15% reported having family or friends who had dropped out, reasons cited were: inability to pay for fees (43%); pregnancy (24%); being slow learners (10%); and illness (9%). 12% said they had difficulties in the classroom, especially hunger, tiredness, and family worries.

Conclusions: Non-monetary related factors present barriers to accessing

MOPEO830
Enhancing linkages to HIV care for jail detainees through HIV testing and connecting to services: multi-site evaluation findings from a HRSA demonstration project

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Issues: The Enhancing Link to HIV Primary Care and Services in Jail Settings Initiative (“Enhance Link”) was funded by the Health Resources and Services Administration’s Special Projects of National Significance (SPNS) initiative to implement innovative HIV testing and linkage to care programs for jail detainees. This session will present multisite evaluation findings from 10 U.S. prison jurisdictions.

Description: To date, most U.S. demonstration projects for HIV-infected, incarcerated individuals have focused on prisons, although 95% of releases come from jails (Spoelting et al., 2009). At many sites, Enhance Link has used rapid HIV testing to identify clients. Case management providers link detainees to care. Observations of counselors and counselors self-reported feeling comfortable discussing same sex relations with counselors and counselors self-reported feeling comfortable discussing same sex issues. Observations of counselors and client satisfaction surveys revealed counselors were better able to provide risk reduction and psychosocial support to MSM. A third of clients used package services. The community survey indicated 73% of respondents were exposed to components of the communication efforts but word-of-mouth was still a significant mode of sharing information on services. Uptake increased compared to the pre-intervention period.

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Conclusions: Non-monetary related factors present barriers to accessing

MOPEO832
Addressing the constraints to primary school education in Swaziland: the need for structural interventions to build resilience to HIV and to strengthen human capital in a maturing AIDS epidemic

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Background: Education is critical in building resilience to HIV vulnerability and for impact mitigation, yet attendance patterns across primary schools in Swaziland suffer from high repetition and drop-out rates. In a country experiencing chronic poverty, food insecurity and the world’s worst HIV epidemic, the barriers to education must be understood. We explore monetary and non-monetary factors driving absenteeism, grade repetition and drop-out amongst primary school students, and apply a gendered-lens to the analysis given the high HIV serorelevance among young pregnant females.

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Conclusions: Non-monetary related factors present barriers to accessing...
primary education. Social and health related concerns are significant factors, and are found to disproportionately affect females. Structural interventions that target women are needed to improve attendance patterns and to retain children in school. This will equip children with critical human capital and life skills to deal with a maturing AIDS epidemic, and support empowerment and HIV prevention programmes for females.

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MOPE0833

Rural poor client on antiretroviral therapy quality of life improves through intensive nutritional education in Tororo district, Uganda

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Background: In Tororo district eastern Uganda, 100 exposed infants and 550 adult clients on antiretroviral, anti-tuberculosis medication and those deemed food insecure were supported with dry food rations for over period of time by World Food Organisation and Plan Uganda branch. The aim was to improve on their adherence and good health. However the adult clients saw no value in the foodstuffs hence resorted to sale it for cash. This resulted to poor health and early death to both the adults and exposed infants.

Methods: The intervention design selected 32 community resource persons from 8 sub counties per county and trained them for two weeks as nutritional scouts to mentor and disseminate nutritional guidelines of ministry of health Uganda to 550 adult clients and 100 exposed infants on antiretroviral, anti-tuberculosis medication so as to increase adherence to treatment and improve health.

The 32 trained nutritional scouts each reached 1/ adult clients in a period of eight months with appropriate food handling practices, and techniques. This was intended to meet increased nutritional needs through demonstration sessions integrated with knowledge and skills to deal with a maturing AIDS epidemic, health seeking behaviours and own monitoring of body mass index.

Results: 300 adult clients out of 550 demonstrated ability on meal planning to meet increased needs, monitor their body mass index in relation with age, sex and height. And 400 adult clients/ adherence to antiretroviral therapy increased and positive living characteristics were observed. That’s ability to work for the living and adoption of cheaper, sustainable locally available and healthy food stuffs.

Conclusion: The impact implementation challenges and how the were overcome will be discussed.

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MOPE0834

Social inclusion a mechanism to reduce vulnerability among female sex workers in Kingston, Jamaica

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Issues: There is a HIV prevalence of 9% among the approximately 8000 Sex Workers in Jamaica. Many female sex workers are coerced into the sex trade at an early age and use it to support their children and families. Early sexual initiation and pregnancy contribute to incomplete education and low literacy rates among this population. Limited access to documentation such as birth certificates and tax registration numbers further limit sex workers access to social services and jobs. These factors as well as the nature of their occupation contribute to stigma and discrimination.

Description: The intervention for sex workers is multifaceted and includes providing information on reproductive health, HIV/STI risk reduction, voluntary counseling and testing, access to formal documentation and social services. Participants are recruited to the workshop by field workers who build relationships with proprietors and sex workers through weekly onsite visit at clubs, bars and street sites. Sex workers are invited to a series of six empowerment workshops. During the workshops the sex workers are assisted in securing formal documentation, including birth certificates and tax registration numbers, which will enable them to open bank accounts and become contributors to a national housing scheme.

Lesson learned: The HIV risk reduction and reproductive health information and services provided in the intervention are better accepted and utilized when sex workers are not as desperate for income because of their inability to access social services. Access to social services reduces poverty, stigma and discrimination.

Recommendations: A consistently multi-faced response to the HIV epidemic that reduces social vulnerability is needed to prevent the cycle of poverty for sex workers and their offspring.

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MOPE0835

Evaluating conditional cash transfers to prevent HIV and other STIs in Tanzania

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Background: With existing prevention efforts showing low effectiveness in most countries, research oriented approaches are needed. Conditional cash transfers (CCT) have been promising in other domains such as education. This randomized control trial assess whether CCT could be adapted to help slow the HIV/AIDS epidemic.

The study hypothesis is that a system of rapid feedback and positive reinforcement using cash as a primary incentive, coupled with counselling and life skills training, can be used to promote sexual abstinence among young people who are at high risk of HIV infection.

Methods: The economic component of the intervention involves the use of CCTs to prevent HIV, other sexually transmitted infections (STIs), and unintended pregnancy by linking cash payments to negative laboratory test results for a set of curable STIs (chlamydia, gonorrhea, trichomonas, syphilis), assessed on a quarterly basis. The psycho-social component involves gender-based counseling and “life-skills” training to address gender inequalities, and to encourage deliberate decision-making in sexual and reproductive health.

This two-year study involves a randomized control trial with two main arms: a treatment arm which receives the economic intervention (CCT) for 1 year starting at baseline, and a control arm which does not. Both arms will receive STI testing, counseling, and treatment at baseline, month 4, month 8, month 12, and month 24. All participants will also receive the psycho-social intervention. The treatment arm will further sub-study of the effect of varying sizes of CCTs. The control arm will allow the team to study the effects of the counseling and life skills training in the absence of the CCT. The 3000 study participants have been randomly selected from the Kilombero/Ulanga district Demographic Surveillance System in Tanzania.

Results: We will present the impact results after one year of intervention (month 12).

Conclusions: The results will be available and analyzed by the time of the conference.

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MOPE0836

Impact of six-monthly STD testing and risk-reduction counseling on STD incidence and HIV seroconversions among exposed men who have sex with men (MSM) in care

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Background: We evaluated whether routine biannual sexually transmitted disease (STD) testing coupled with brief risk-reduction counseling reduces STD incidence and HIV risk behaviors.

Methods: The Study to Understand the Natural History of AIDS and HIV in the Era of Effective Therapy (SUN) is a prospective observational HIV cohort study conducted in four U.S. cities. At enrollment and every 6 months thereafter, participants completed a behavioral survey and were screened for syphilis, N. gonorrhoeae, and C. trachomatis. All diagnosed STDs were treated per standards of care. Medical providers conducted brief risk-reduction counseling with all patients. Among MSM, we examined trends in STD incidence and rates of self-reported risk behaviors before and after exposure to the risk reduction intervention. The “pre-intervention” visit was the study visit that was at least 6 months after enrollment STD screening and treatment and at which the participant was first exposed to the intervention. The “post-intervention” visit was 12 months later.

Results: Among 216 MSM with complete STD and behavioral data, median age was 42 years; 22% were non-Hispanic black or Hispanic; 83% were on HAART; 84% had an HIV RNA level < 400 copies/mL, and the median CD4 count was 496 cells/mm3. Twelve months after first exposure to the risk-reduction intervention, STD incidence declined by 8% (p=0.041). Rates of unprotected receptive or insertive anal intercourse with HIV-positive partners increased (19% to 25%, p=0.024) but with HIV-negative partners there was no change or with partners of unknown HIV status (to 22%, p=0.590).

Conclusions: Risk behaviour declined significantly among HIV-infected MSM after implementing frequent, routine STD testing coupled with risk-reduction counseling. Participants may have increased engaging in serosorting with HIV-positive partners after the intervention while maintaining stable rates of unprotected sex with at-risk partners. These findings suggest the need for routine STD screening and risk-reduction counseling for HIV-infected MSM.

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MOPE0837

Risky behaviour among PLHAs on HAART

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Background: Unprotected sex is several times riskier among PLWHA on ART. Study objectives were to examine the prevalence of high risk behaviour among PLHAs, assess predictability of HIV infection. Access sex as access to sexual health information, HIV prevention and care programs. A sample of 1,840 old PLWHA on ART in Zambia.

Methods: 320 PLHAs completed questionnaires in which some answers were given orally and others in writing; Variables include HIV/AIDS knowledge, sexual behaviour, perceived risk, and knowledge on Partners ART regimen, risk reduction intentions, peer norms and partner risk levels.

Results: Un protected Sex between PLWHA is at the core of HIV re-infection among many Zambian contexts with consequences for drug resistance, treatment failure and subsequently transmitting the resistant strains of a virus to a part-

239
MPOE0838
Positive C.A.R.E. program: expanding the dimension of HIV pharmacy patient care
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Issues: Managing HIV patients in a community pharmacy setting exposes complexities in outpatient care. A patient’s top priority is usually not taking treatment medication. What is needed is a program that provides integrated support services to HIV patients diagnosed with significant co-morbidities (HCV, HPV, mental illness, substance abuse), many of whom have institutional barriers to accessing medications. A key treatment goal is to dynamically increase their adherence and persistence to ARV therapy, psychotropic medication and other pharmacy-based therapeutic interventions.

Description: Zive Pharmacy, a Bronx, New York, HIV specialty pharmacy recognized patients were having problems consistently adhering to their regimen due to lifestyle issues. Using a vision of an ADSV activist with the help of an M.D. and a Pharm.D., they created a social services component of patient care to fulfill the ADSV ADAP HIV Education Program. The program, driven by qualitative and quantitative outcomes based measurements, will engage hard-to-reach populations in neglected areas towards improving HIV treatment education, crisis intervention, short-term benefit management counseling, clinical trial education and referral, harm reduction and other programs that are currently underfunded by the Ryan White CARE Act and other public funding sources.

Lesson Learnt: This program is intended to enhance the therapeutic response of HIV patients to HAART by reducing the barriers to adherence and persistence among HIV patients at Zive Pharmacy over the course of two years. By implementing these programs, patient quality of life should improve dramatically. Sustainability and replication of programs elsewhere will occur due to evidence of significant cost-benefit savings for public health insurance programs.

Next steps: Replication of programing will demonstrate quantitative cost benefits to long term management of patients on HAART presenting multiple co-morbidities in resource poor settings.

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MPOE0839
Formation of team effort in paralegal as a structural intervention strategy
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Background: The number of cases of raids on male sex workers (MSW) which is covered as professional massage parlors lead inhibition of HIV prevention programs in the group of MSW. Especially for the 100% condom use program and regular screening. This resulted many massage parlors are closed, so that the impact on MSW has no longer accompanied by.

The same thing happened to the gay whose harassed in the discrimination either by the public and security men.

Lack of knowledge of law and human rights of MSW and the massage partner owners (Owner) used by police officers as exploitation arena. That’s why Himpunan Abiasa, Program Director, Bandung, Indonesia

Methods: Paralegals orientation for the owners, MSW, and key persons in the community. Giving understanding and knowledge of the basic law (Criminal and Civil Law), human rights and public speaking. Knowledge related litigation provision and non-litigation, Role and Functions Paralegals, Critism case with based on experiences cases and incidents of human rights violations, experienced by the participants, Paralegal team formation.

Results: Increased understanding and awareness of the MSW rights as citizens in the eyes of the law. Paralegal Team Establishment of MSW and Gay groups in Bandung. Forming alliances, support and cooperation with other Paralegals groups.

Conclusions: Paralegal team formation as an effort to provide awareness and understanding of related legal and human rights, an Highly effective Structural intervention strategy, because it involved the owners and MSW. An effective media for providing raiding man rights law, so that the owner and MSW understand of their rights as citizens. Empowering MSW, the owners are able to protect their own legal related issues. Support the 100% condom use program and periodical screening among MSW.

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MPOE0840
Implementing HIV prevention in urban STI clinic settings
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Issues: Sexually Transmitted Infection (STI) clinics are an ideal setting for delivering HIV prevention interventions because of the potential to reach large numbers of individuals at demonstrable risk at a “teachable moment.” Studies have shown the effectiveness of video-based HIV prevention interventions in urban STI clinic settings. Little has been published on implementation feasibility.

Description: The Chicago Women’s AIDS Project, a grassroots non-profit organization, has worked for over a decade providing HIV prevention in STI clinics to nearly 15,000 clinic patients annually. Partnered with a local university, they developed “Safe in Chicago,” an adaptation of an evidence-based HIV prevention intervention, involving a DVD and group discussion, in three diverse clinics: 1) a high volume clinic in a high-income neighborhood, 2) a high volume clinic in a low-income neighborhood, & 3) a low volume clinic in a low-income neighborhood.

Process/formative evaluations included over 1,300 participants. Feasibility and acceptability of three different intervention situations were assessed:

1) a standard city clinic (control)
2) a scientifically-effective DVD-based intervention (“Safe in the City”), and
3) “Safe in Chicago”, which includes the “Safe in the City” DVD + a facilitator-led discussion intervention.

The evaluation plan consisted of observations, key informant interviews, patient/clinic staff focus groups, facilitator self-evaluations, ongoing feedback loops among staff/evaluation team and weekly meetings.

Lessons learned: Clinic settings provide an arena to reach high numbers of patients with behavioral skills training interventions. DVD-based interventions are easily integrated into STI clinic settings, while on-site group-based discussions assist with addressing the challenges to reducing sexual risk on an individual level. Factors influencing feasibility and acceptability data included duration of visit, clinic size/ population, time of day, facilitator quality, and type of intervention received.

Next steps: Next steps include tailoring the intervention to address clinic’s unique organizational issues, continuing the process evaluation and beginning a full-scale outcome-focused evaluation.

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MPOE0841
Structured treatment preparation and patient readiness intervention improves retention in care rates in Nigeria
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Background: The ACTION project, a national HIV/AIDS care and treatment program implemented by the Institute of Human Virology - Nigeria with PEPFAR support, provides antiretroviral therapy (ART) to over 60,000 patients. However, adherence and retention in care challenge optimal patient outcomes. In 2008, we re-structured our treatment initiation process so that patients starting ART received 3 weeks of HIV education, disclosure support, treatment buddy encouragement, adherence counseling and linkages to support and community groups. Before starting ART, patients are assessed by trained counselors and given certificates applauding their commitment to participate in their care management. Adherence support is continued with supportive counseling, home visits, tracking and back-to-care linkage if appointments are missed. We assessed retention in care at University of Benin Teaching Hospital, one of our sites, after intervention implementation.

Methods: Appointment and Lost-To-Follow-Up (LTFU) tracking data was abstracted from standardized clinic registers for 238 patients who started ART between May and October 2009. Data was analyzed using STATA 10 and compared using the Z-test.

Results: Historical program data showed that of 1,140 patients who commenced ART between March 2005 and August 2006, 251 (22%) were LT FU after 3 months (p=0.0002). 126 (53%) were on time (< 7 days) to appointment. Of the 112 (47%) who were ≥ 7 days late: 2 died; 1 transferred; 48 were linked back to care within 30 days; 34 linked back between 30-90 days; and 27 still LT FU after 90 days.

Conclusion: Structured treatment preparation interventions can increase retention in care rates. Improved tracking and documentation of patients who miss appointments also likely prevents misclassification of transfers and poor documentation of patients who did not accept appointments.

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240

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Integrating HIV services into outpatient and inpatient services MOPE0842-MOPE0845

MOPE0842
Universal opt-out HIV testing in publicly funded methadone clinics in San Francisco

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Issues: In San Francisco it is estimated that 15% of persons with HIV are unaware of their infection. Increasing testing options may increase HIV status awareness. In this project, our objective, based on the Centers for Disease Control and Prevention’s (CDC) “Recommended Revisions for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings” (2006), is to integrate universal opt-out HIV antibody screening in publicly funded methadone clinics.

Description: Funding from the Substance Abuse Mental Health Service Administration to provide HIV testing in drug treatment programs was used to expand testing in four methadone clinics. In July 2008, clinics began universal opt-out testing at induction and annual physical examinations.

Lessons learned: Incorporating universal HIV antibody screening fits into opioid treatment programs and is acceptable to most patients. Prior to project implementation, the clinics provided 400 tests annually. In 2009, 1794 duplicated patients were offered opt-out testing; with 1390 (77.4%) accepting opt-out testing and results disclosures; standard policies and procedures describing opt-out testing, data collection, results disclosures, and linkage to medical care and partner services; and data collection systems.

Next steps: Next steps include increasing testing to more closely match clinic’s census (about 3500 duplicated patients per year) and continued data analysis to determine frequency of testing, given the low rate of newly detected cases compared with high-risk groups locally. Possible reasons for this low rate in what is traditionally considered a high-risk population in San Francisco may include a higher rate of HIV among persons declining testing, low incidence among opioid users accessing treatment, San Francisco’s 18-year history of legal syringe access programs, and testing accessibility at other venues.

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MOPE0843
Integration of HIV and outpatient services in Lusaka, Zambia: Improving HIV case finding with opt-provider initiated testing and counseling

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Background: Client-initiated voluntary counseling and testing (VCT), operating as stand-alone services in primary health care clinics are the dominant form of HIV counseling and testing in Lusaka. We describe preliminary results from the introduction of routine, opt-provider initiated testing and counseling integrated as part of a model of integrated HIV and OPD services in four urban clinics.

Methods: Two trained lay counselors per clinic routinely performed PITC with patients presenting in OPD with unknown HIV status. Outcomes of interest included testing acceptance, test result and enrolment into HIV care. Data was collected from clinic registers, aggregated, and mean monthly rates of testing calculated before and after introduction of PITC calculated.

Results: Four clinics provided PITC services in Lusaka, 7555 patients were counseled with PITC, 6552 accepted testing (86%) and 1761 (21%) were HIV-positive. From start-up, Clinics 1-4 enrolled 41%, 48%, 55% and 35% of reactive patients into HIV care, respectively. Twelve months following the introduction of routine PITC, the mean of combined (VCT plus PITC) monthly testing in Clinics 1 and 2 increased 174% (174 to 303) and 340% (73 to 250) respectively. In Clinics 3 and 4 nine months after the introduction of PITC, the mean of combined monthly testing increased by 235% (0 to 235) and 270% (183 to 497) respectively. Mean monthly rates of VCT alone remained unchanged or increased in all clinics.

Conclusions: Adoption of routine PITC in primary care outpatient department in Lusaka improved accessibility and acceptability of HIV testing and significantly increased uptake. When linked to VCT, PITC is a sustainable and relatively low-cost intervention that should be implemented in high HIV prevalence OPD settings. Maximizing enrollment of patients into HIV care remains an ongoing challenge and warrants further research.

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MOPE0844
Effect of integration of antiretroviral treatment on basic HIV and primary health care services in a rural health centre III in Luweero district, Uganda

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Background: With increased scale up of antiretroviral treatment (ART) services in Uganda, many programs have established either stand-alone ART centres within an existing primary health care (PHC) facility or completely separate sites for provision of these services. Reach Out Mbuya HIV/AIDS Initiative scaled up and integrated ART services into existing PHC services at St. Mary’s Health Centre III in January 2009. In Uganda, no study has documented effect of integration of ART services into a PHC setting, particularly effect on non HIV PHC services. We assessed the effect of this integration on non HIV PHC services as well as on basic HIV services.

Methods: We employed a before and after design and analyzed routinely collected monthly reports data in two different times relative to integration in January 2009. Time 1 from January to September 2008 and Time 2 from January to September 2009. We calculated mean monthly quantities in selected variables and determined mean monthly difference. Using paired sample T-test, we tested if this mean monthly difference is statistically significant.

Results: We noted statistically significant increase in mean monthly values from Time 1 to Time 2 for: non HIV outpatient consultation utilization (P = 0.0003), non HIV inpatient admissions (P=0.0027), antenatal clinic attendance (P=0.0578), deliveries (P=0.0417), total non HIV laboratory tests (P=0.0001), deworming (P=0.0462) and vitamin A supplementation (P=0.0458) for children. Basic HIV services also had statistically significant mean increase; total HIV consultations (P=0.0001), HIV counselling testing and receiving results (P=0.0069), and number tested positive and linked to care (P=0.0005). On the contrary we noted decline in mean values of immunization in Time 2 compared to Time1

Conclusions: Integration of ART into PHC settings increases utilization of non HIV PHC services and basic HIV services. Integrated model of care could be adopted in scale up of ART care.

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MOPE0845
Late presentation of hospitalized patients is still a major obstacle to ART initiation in South Africa

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Background: In South Africa, the mean CD4 count at start of therapy remains under 100cells/mm³. We instituted a case-management program in a tertiary hospital in Johannesburg in order to improve patient retention rates after inpatient stays.

Methods: A case manager follows all admitted patients during the hospital stay and after discharge. We performed a retrospective record review of the programme to determine outcomes and to describe the population presenting to the inpatient wards.

Results: 512 patients were enrolled from March 2009 to July 2009. The mean age was 36.0 years (Interquartile range, 30–40). The mean CD4 count was 106.7(21.152) cells/mm³. 308 (60.2%) patients knew their HIV status at the time of admission of which 126 (40.9%) had received or were currently on ART, CD4 counts did not differ in patients who knew their status and those who did not (mean CD4 of 103.9 vs 110.9 cells/mm³, p=0.5). 191 (37.3%) received a new diagnosis of HIV during hospital stay. 148(28.9%) of patients had a previous history of tuberculosis. Patients who had previous tuberculosis were more likely to know their HIV status (77.0% vs 53.3%, p<0.001). 79.2% were admitted for a tuberculosis-related diagnosis and meningitis, pneumonia were other frequent diagnoses. 110 (21.5%) patients had a recent contact with a health care clinic or hospital before this hospital stay but this did not differ in known positives vs undiagnosed patients (p=0.59). 112 patients died in the hospital and 20 died after discharge, (overall mortality to 25.8%). 119 (23.2%) patients were transferred out.

Conclusion: Patients presenting to tertiary care still have very low CD4 counts and advanced disease. CD4 counts did not differ in patients who knew or did not know their HIV status. Previous tuberculosis was strongly associated with knowledge of HIV status, suggesting a lost opportunity for early referral from TB sites.

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Implementing integrated HIV-TB, HIV-STI, of other services MOPE0846-MOPE0859

MOPE0846
The South African road freight industry - a successful sector model
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Issues: The HIV epidemic has a huge impact on the trucking industry in South Africa, negatively affecting staff attendance, productivity, and road safety. The migratory nature of trucking compounds the problems by contributing to a wider and more rapid spread of HIV and sexually transmitted infections (STIs). High absenteeism has serious implications for the economy of South Africa as 80% of all goods are transported by road.

Description: The Trucking Wellness Programme was launched in 1999 by the National Bargaining Council for the Road Freight Industry to create HIV and STI awareness among long-distance truck drivers and sex workers. Today, the programme, managed by the Corridor Empowerment Project (CEP) has established 15 wellness centres along the major roads. These centres are staffed by registered nurses and counselors. The multi-faceted project directly benefits the employees and employers of the road freight industry and their families, sex workers, and communities.

Treatment, care and support programmes will continue to increase access to counselling and testing, and related programmes, including treatment and nutrition, will enable employees living with HIV to lead health and productive lives. The Trucking Wellness Programme also aims to upgrade and implement a monitoring and evaluation framework for the transport sector, to invest in the programme’s potential aims at behavior changes, and to ensure sector knowledge of and adherence to legal and policy provisions. The project will provide training to ensure ongoing skills development among healthcare providers to guarantee high-quality services.

Lessons learned: A robust and flexible programme like this one is vital for the health, safety, and economic health of South Africa, and this programme will address a critical gap in the HIV prevention, treatment and care sector.

Next steps: Ensuring a participatory approach, develops a strong working relationship with key players, including the national and provincial Departments of Health, non-governmental and community-based organizations.

MOPE0847
Rapid implementation of an integrated large-scale HIV counseling and testing, malaria, and diarrhea prevention campaign in rural Kenya
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Background: Integrated multi-disease prevention in low resource settings can increase coverage, equity and efficiency in controlling high burden infectious diseases. We implemented a one-week integrated multi-disease prevention campaign with HIV counseling and testing (HCT), prevention of sexually transmitted diseases, malaria and water-borne diseases, aiming to reach 80% of adults aged 15-49.

Methods: All residents of Lurambi Western Kenya were eligible, a total population of 115,862 (51,178 aged 15-49). 31 temporary sites in strategically dispersed village centers offered HCT, 60 male condoms, a long-lasting insecticide-treated bednet (LLIN), a household water filter for women or an individual water filter for men. For those testing HIV-positive, a 3-month supply of cotrimoxazole, CD4 cell count and referral for follow-up care and treatment were provided.

Results: 47,311 people attended the campaign, uptake of the multi-disease preventive package was 96%. 99.7% accepted to test for HIV (87% aged 15-49, 60% women). 4% tested HIV-positive (5% women and 3% men), 6% had CD4 counts (median of 541 cell/µL; IQR: 356, 754). Of those tested, 80% had never been tested previously. A total of 386 HCT certified counselors attended to an average of 17 participants per day, consistent with recommended national figures for mass campaigns.

Among women, adjusted odds ratios showed HIV infection varied by age, and was more likely with an ended marriage (e.g. widowed vs. never married, OR=3.91; 95%CI, 2.87-5.34) and lack of occupation. In men, quantitatively more common among HIV-infected women participants who knew their status but were not tested (e.g. widowed vs. never married, OR=5.9; 95%CI, 3.5-13.9). Always using condoms with a non-steady partner was more common among HIV-infected women participants who knew their status compared with those who did not (OR: 5.4 (95% CI; 2.3-12.8) no difference was shown in men.

Conclusions: It is feasible to rapidly offer integrated universal HIV testing, diarrhea and malaria prevention services to underserved rural communities.

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MOPE0848
Improving the integration and performance of TB and HIV interventions in Northern Uganda
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Issues: Integrating HIV activities still represents a challenge for TB control programmes. Before 2006, TB and HIV in Uganda were vertically being managed by two distinct programmes with different funding sources, different staff operating in detached departments, different schedule of drug order and procurement and different recording systems. Relationship between the two programmes started in 2006 with dissemination of policy documents by the Ministry of Health recommending avenues for collaboration. The Northern Uganda Malaria AIDS and Tuberculosis (NUMAT) Program operates in nine districts of northern Uganda, a region whose HIV prevalence of 8.2% is higher than the national average.

Description: NUMAT worked with the nine districts and the TB regional office, through multiple interventions including: extensive training of health workers in TB/HIV collaborative activities; improved availability of TB drugs, reagents, HIV test kits and other supplies at diagnostic & treatment centers; integrated support supervision; technical assistance to conduct quarterly review meetings on TB/HIV; dissemination of educational messages to the local leaders and the general public. TB/HIV performance from the Northern Region from 2006 to 2009 was assessed using the existing reporting system.

Lessons learned: HIV/TB parameters were included in the case management reporting of the TB programme and HIV-related information added to the TB registers and TB patient cards. The proportion of TB patients tested for HIV steadily increased from 43% in 2006, to 67% 2009. The percentage of co-infected HIV/TB patients stabilized around 50%. No information was recorded on cotrimoxazole prophylaxis and anti-retroviral treatment for the co-infected patients in 2006. In 2009, 84% of co-infected patients were on cotrimoxazole while 21% was on ART.

Next steps: A shift from a vertical approach to a more integrated collaboration is possible. However, gaps remain and continuing technical support is necessary to sustain achievements in the long-term.

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MOPE0849
Impact of integrating an ART clinic into a regional tuberculosis hospital in rural Guatemala
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Background: Internationally, there is an increasing trend toward integrating ART clinics with tuberculosis centers, but this has not previously been attempted in Guatemala. We studied the impact of integrating an ART clinic into a regional TB hospital in Quetzaltenango that has seen a rapid increase in HIV co-infection among its Mayan Indian tuberculosis patients (from 12% in 2002 to 31% in 2008).

Methods: We compared newly diagnosed HIV/TB patients from the National Hospital Dr. Rodolfo Robles from August 2005 to July 2006 (before adding an ART clinic to the hospital) and from February 2008 to January 2009 (after doing so). We evaluated these two cohorts for access to ART treatment, fatality rate, and the cost-benefit of treatment.

Results: From August 2005 to July 2006, 94 TB patients (70% male and 30% female) were newly diagnosed with HIV in the regional TB hospital. Only 5% of the patients received ART in other clinics. The 12 month fatality rate was 66%. The cost of treatment (Anti-TB, ART and personnel administering medications) was $1281 per patient with 34% surviving one year. From February 2008 to January 2009, 157 TB patients (64% male and 36% female) were newly diagnosed with HIV; 71% of these received ART. There was a significant reduction in the fatality rate to 17%. The cost of treatment was $1520 with a one-year survival rate of 83%. Cost per surviving patient fell from $3,768 to $1,831.

Conclusions: The integration of the ART clinic in this TB center provided mutual benefits for TB and AIDS treatment by providing one-site treatment access for both. Early HIV testing and treatment is essential to reduce the fatality rate from co-infection. In addition to saving lives, providing ART treatment improved the cost-benefit ratio of the TB program for co-infected patients.

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MOPE0850
Adherence to the national guidelines in the diagnosis of sputum negative tuberculosis: a case of Gulu Regional Referral Hospital in Northern Uganda

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Background: The HIV epidemic has increased the occurrence of smear-negative pulmonary tuberculosis (TB) in Uganda. This poses a serious challenge, since HIV co-infection is one of the clinical presentation of TB, making diagnosis more difficult. It is estimated that in Uganda around 50% of TB patients are co-infected with HIV. In Gulu district, located in northern Uganda where HIV prevalence of 8.2% is higher than the national average, TB accounts for 30% mortality in patients with sputum negative TB. This study assessed adherence to World Health Organization and national standardized guidelines for diagnosis of sputum negative TB.

Methods: A retrospective analysis of patient records from hospital TB registries and in-patient case notes was conducted to verify whether clinicians followed the recommended diagnostic algorithm. The algorithm includes: i) a two-week history of cough, ii) no response to a course of broad spectrum antibiotics, iii) two negative sputum smears for acid-fast bacilli, and iv) a chest radiograph with abnormalities consistent with TB. Data were analyzed using SPSS 10.0 cross-tabulation.

Results: From a cohort of 370 patients diagnosed and treated for tuberculosis in 2008 in Gulu regional referral hospital, 154 patients (42%) were found to be smear-negative. All 154 patients had chronic cough (>2 weeks), 147 patients (96%) had received a two week broad spectrum antibiotic, 39 (25%) had at least two sputum smears done and 117 (76%) had a chest radiograph done. Overall, 22 of 154 patients (14%) had all the four diagnostic criteria met. Additionally, 29 (32%) of the 92 patients who tested for HIV were found HIV positive.

Conclusions: The WHO/MSM recommended sputum negative TB diagnostic algorithm was sub-optimally used with over reliance on chest radiology. These guidelines are crucial in resource limited settings as a refresher-training and mentoring supervision of health workers is necessary to minimize over diagnosis of sputum negative TB.

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MOPE0851
Improving TB case detection: outcome of a rapid assessment of TB labs in peripheral HIV clinics in Northern Nigeria

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Issues: Many countries have increased national collaborative activities to address HIV among people diagnosed with TB. Between 2005 and 2007 the percentage of TB patients tested for HIV in African countries with a high prevalence of HIV rose from 14% to 41%. Despite these strides many obstacles remain. The detection of new smear positive TB cases has slowed, suggesting that the 2010 milestone of a 78% detection rate will not be achieved unless countries enhance HIV testing and active engagement of all people suffering from TB.

Description: 16 rural hospitals providing TB laboratory services were assessed based on the National TB and Leprosy Control program strategy were assessed to identify the extent of provision of TB/AFB services in six northern States of Nigeria. The evaluation was based on observation and administration of structured questionnaire adapted from the WHO and data analysed using epifino software.

Lessons learned: Of the sixteen sites assessed 37.5% (6/16) have a separate TB laboratory, 60% (9/16) of the sites have written standard operating procedures for Acid fast Bacilli methods and equipment while 40% do not. All of the staff performing AFB microscopy have had an initial training whereas only 22.4% have had a refresher training. There are gaps in the knowledge and skills among the laboratory workers who engaged these fundamental gaps in the delivery of TB services in rural hospitals.

Next steps: Results from this assessment is currently being used to focus intervention that improves TB/AFB detection and services

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MOPE0852
Using performance based incentives to increase HIV testing among tuberculosis patients in Myanmar

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Issues: PSI/Myanmar provides health products and services, including treatment for tuberculosis (TB), to low income communities throughout the state. The quality of health services is ranked 18th on the list of 22 Tuberculosis “High Burden Countries” and the northern region has the highest HIV/AIDS cases in Thailand. At the same time the HIV/AIDS patients are the patients most difficult to contact, which hinders the successful treatment. The TB-HIV collaboration model was introduced in the lower north of Thailand.

Description: We developed TB-HIV collaboration special project from 2005 to 2009. Implement setting area is all of 46 hospitals cover 16 provinces in upper north of Thailand. We expanded project cover area, development of health service system for TB-HIV patients, human capacity building on TB-HIV collaboration, and HIV/AIDS patients successfully access to ARV in the lower north of Thailand 2005-2009

Lessons learned: The use of performance based incentives has been successful in motivating Sun providers to refer clients to PSI/Myanmar’s HCT sites, and the provision of transportation fees has reduced a significant financial barrier for clients. Between January and October 2009, 396 women and 866 men, or a total of 24% of Sun’s TB patients received HCT at PSI’s two testing sites, representing a five-fold increase over 2008.

Next steps: Incentives will continue at PSI’s two HIV testing sites, and PSI will explore options to provide incentives for HCT through other providers. PSI will advocate for policy change and seek permission to provide routine opt-out HCT for TB clients at all Sun clinics. In 2010 PSI will implement a marketing campaign to increase HCT testing numbers.

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MOPE0853
Reaching rural youth with SRH and HIV services in Malawi through mobile clinics: the costs of expanding integrated services

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Background: Youth are an important but often underserved population for HIV and reproductive health services. To address this, in rural Malawi the Family Planning Association of Malawi (FPAM) introduced mobile clinics providing sexual and reproductive health (SRH) services, voluntary counselling and testing (VCT) and general curative services. To understand how costs change as services are expanded, this study presents the total and unit costs of these mobile clinics during the first 9 months of operation.

Methods: Financial and economic costs were collected retrospectively from October 2008 to June 2009 from the providers’ perspective using the ingredients-based approach. The incremental monthly costs of implementing integrated mobile services, added onto static clinic services, were estimated. Routine monitoring and evaluation data were used to explore new service uptake among youth (10-24 years of age) compared to all age groups. These data were combined to develop monthly unit cost estimates.
MOPE0855
Operational evaluation of the 2006 WHO guidelines to improve the diagnosis of smear-negative and extra-pulmonary tuberculosis in HIV-prevalent settings

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Background: In 2006 WHO issued guidelines to improve the diagnosis and outcomes of smear-negative (PTB-) and extrapulmonary (EPTB) in HIV-positive patients. These guidelines include HIV testing, sputum smear, chest X-ray and culture in the diagnostic algorithm and need validation.

Methods: Prospective study of PTB and EPTB suspects in 4 study sites in Phnom Penh, Cambodia.

Results: Of 105 HIV-positive patients, 1,665 analyzed TB suspects were started on TB treatment: 30 (26.6%) with smear-positive pulmonary TB (PTB+), 23 (21.9%) as EPTB and 52 (49.3%) as PTB+. Median time to TB treatment initiation was 6 days (IQR: 1 - 15). 128 (40%) of PTB+ patients started TB treatment within 3 days (IQR: 1 - 4) for PTB+; 9 days (IQR: 5 - 17) for PTB-. Seventy three patients (69.5%) completed treatment or were cured, 17 (16.2%) defaulted, 3 (2.9%) died, 1 (1%) patient was categorized as treatment failure, 11 patients (6.9%) died, 1 (1%) patient was categorized as treatment failure, 11 patients (6.9%) died, and 1 (1%) patient was categorized as treatment failure. 11 patients (6.9%) died, and 1 (1%) patient was categorized as treatment failure.

Conclusions: The integrated approach was good. Default rates were low. Lack of access to TB culture and clinical diagnostic algorithms validated in HIV-positive settings could mean TB was over-diagnosed and failure under-diagnosed. Validated TB diagnostic algorithms in HIV-infected children are urgently needed in resource-limited settings.

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MOPE0856
Outcomes of tuberculosis in HIV-infected children treated in integrated outpatient clinics in Yangon, Myanmar

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Background: Myanmar has a high burden of HIV and TB. Worse TB outcomes have been reported in HIV-infected children. We describe clinical outcomes of TB treatment in HIV-infected children in five integrated HIV and TB Medecins sans Frontieres (MSF) outpatient clinics in Yangon, Myanmar.

Methods: A retrospective analysis of all children under 14 years of age who received TB treatment in 4 TB/HIV integrated children in 2009 and 2010 was conducted. We reviewed medical records for age, gender, weight, weight for age, weight for height, CD4 levels, TB outcome, HIV status and other co-morbidities.

Results: Of the 58 children who started TB treatment, 30 (51.7%) were male and 28 (48.3%) were female. The median age was 5.3 years (range 1 months to 13 years). 144 (24.8%) were diagnosed with TB (79 female; 34 extra-pulmonary, 110 pulmonary (9 smear-positive, 7 smear-negative). At baseline 117 (81.1%) of the patients had severe immunodeficiency. TB treatment was commenced before ART (median 3.7 months) in 119, and commenced after ART in 25 (4.2 months), 133 (21.0%) had successful TB outcomes. Adverse outcomes (death, failure, default) were twice as likely in children diagnosed with TB before rather than after commencing ART (8.4% versus 4%, p < 0.01). All five failures were in patients ≤ 5 years.

Conclusions: Treatment outcomes in a patient-centred and integrated approach was good. Default rates were low. Lack of access to TB culture and clinical diagnostic algorithms validated in HIV-positive settings could mean TB was over-diagnosed and failure under-diagnosed. Validated TB diagnostic algorithms in HIV-infected children are urgently needed in resource-limited settings.

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MOPE0857
HIV-TB Co-ordination in Mumbai, India

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Background: The dual epidemic of HIV and TB is a prominent issue on the global & regional health agenda. HIV infection has worsened the burden of TB, especially in countries where prevalence of HIV infection and TB infection is high. It is estimated that one-third of all people living with HIV/AIDS are co-infected with Mycobacterium tuberculosis. Mumbai, with a population of more than thirteen million, has an estimated 20000 newly diagnosed seropositives and an estimated 30287 new TB cases each year.

Objectives: To find out the proportion of ICTC clients diagnosed as TB cases and put on treatment, out of those referred for investigation among clients attending the ICTC. To assess the proportion of sputum positive, sputum negative and extrapulmonary TB amongst the TB cases diagnosed out of the referred clients.

Methods: Under the HIV-TB Co-Ordination Program, the ICTC-DMC referral linkage was established with the objective of identifying TB suspects amongst ICTC clients and referring them to Designated Microscopy Centers (DMCs) for the early detection of TB and treatment initiation.

Results: Between 1 January 2009 to 30 September 2009, 14312 ICTC clients were identified as TB suspects, out of which 1391 (9.9%) were diagnosed as TB cases. 1079 (77.6%) patients were put on DOTS. Out of 7373 HIV-positive patients, 1391 (9.9%) were diagnosed as TB suspects, out of which 1391 (9.9%) were diagnosed as TB cases. 116 (28%) patients were categorized as smear positive TB, 116 (28%) patients were categorized as smear positive TB, 92 (21%) patients were categorized as smear negative TB and 120 (29%) as extra-pulmonary TB. Amongst 6939 HIV-negative patients referred as TB suspects, 579 (60%) were diagnosed as smear positive TB, 302 (31%) as smear negative TB and 91 (9%) as extra-pulmonary TB.

Conclusions: The cross-referral service linkages have made a significant contribution to HIV and TB co-management, and will greatly improve quality of life and survival of HIV-infected TB patients by facilitating their early linkage to care and treatment.

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MOPE0859
Tuberculosis and HIV/AIDS prevention and care in prisons in Cameroon: achievements and constraints
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Background: Rates of infection of communicable diseases, particularly tuberculosis (TB) and HIV, are much higher in prison populations than in civil society. We evaluated the implementation of a comprehensive TB and HIV/AIDS prevention and care programme conceived according to standards of and in collaboration with general health services in nine prisons in Cameroon.

Methods: Descriptive and retrospective study. Data collection and evaluation of 2009 activities from prisons registers, TB registers, CMX prevention registries, HIV/Aids registers and activity reports in the target prisons.

Results: During 2009, the following activities were realized in the nine target prisons comprising about 9,000 inmates (38% of the total Cameroonian prison population): Medical screening of 7,049 (93%) out of 7,596 new entries; provider-initiated VCT for 6,208 (82%) of new entries - 482 (7.6%) inmates detected with HIV infection; CMX prophylaxis for 313 (68%) of HIV+ inmates; CD4 counts for 195 (43%) of HIV+ inmates; 32 (82%) out of 39 HIV+ inmates with indication indicated benefit from ART. 1617 inmates were screened for TB disease, 245 among them (2.7% of the total target population) were smear positive pulmonary TB cases, put on treatment.

Conclusions: It is possible to ensure public health care standards for TB and HIV/Aids prevention and care for inmates in Cameroonian prisons. However, beside operational, underfunding and lack of manpower problems two major challenges persist.

1. To ensure adequate conditions in the prison like extreme overcrowding, malnutrition, poverty, and strong informal power structures; all four, synergistically, are maintaining transmission of the two infections within the prison.

2. To ensure a continuum of care between prisons and general health services for prisoners notified with TB disease and HIV/Aids and released.

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MOPE0861
Service delayed is service denied: barriers in linking eligible HIV infected pregnant women to ART
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Issues: Recent recommendations suggest that HIV infected pregnant women with CD4 counts less than 350 should be started on ART. There are no enough field-based data regarding problems in implementing the recommendations.

Description: Prayas, an NGO, is running a PMTCT project since 2002 in private health sector in ten districts of Maharashtra, India. We started providing free CD4 testing to HIV infected pregnant women to select an appropriate regimen as per prevalent WHO guidelines. We describe the difficulties in linking eligible women to ART. While implementing the project, CD4 counts were advised to 142 HIV infected pregnant women in 2009. Twenty (14%) couldn’t get the counts done. Among women tested for CD4 35 (29%) were not eligible to start ART. Of those 10(28.6%) and 13 (37%) started accessing care from government and private sector respectively. Twelve (34.5%) could not be linked to any care system till delivery. The difficulties in linking were:

- a) high costs in private sector, b) distance to care centers and c) multiple visits (4 to 16), complex systems and lack of facilitators at the government hospitals for getting enrolled for ART.

Lessons learned: Translating recommendations in practice are difficult. Involvement of PHA network, NGOs or others (community health workers) can improve the situation.

Next steps: As delays in linking HIV infected pregnant women to interventions could hamper PMTCT outcomes; the programs as well as systems need to be more flexible. Public-private partnership could help bridge the demand-supply gap.

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MOPE0862
Challenges in the PMTCT cascade in rural Zambia: evaluation of a PMTCT program and call for holistic approach
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Background: Successful prevention of mother-to-child transmission (PMTCT) of HIV requires each mother-infant pair to negotiate a cascade of events. Failure at any step of the PMTCT cascade results in reduced coverage and diminished program effectiveness.

Methods: Routinely collected data from the Antenatal Clinic (ANC), the Voluntary Testing and Counseling (VCT) Unit, and the HIV clinic at Maha Hospital, in rural, Zambia were analyzed for pregnant women receiving care between October 2007 and April 2009. Characteristics at ANC presentation, attrition in HIV care for those who tested HIV-positive, and PMTCT drug regimen evaluations were evaluated.

Results: Using HIV rapid testing and an opt-out strategy, HIV-test acceptance rate at the ANC was 95%. Of 1086 women tested, 81 (7.5%) were HIV-positive. Median gestational age at testing was 26.6 weeks (IQR: 23-30), and male involvement at the ANC was low (0.3% came as a couple). Only 69 of 139 (49.6%) women found to be HIV-positive at the ANC or VCT registered at the HIV clinic for further PMTCT care. 476 PMTCT-eligible women registered at the HIV clinic and had delivered. Only half (48.6%) received a complete PMTCT drug regimen; 23.0% received none. Women who received no PMTCT regimen were more likely to be literate (70% vs. 43.6%, p=0.004) and to have longer travel times (4 vs. 3 hrs, p-value=0.007). The majority of the (21.0%) women who received no PMTCT regimen as per prevalent WHO guidelines. We describe the difficulties in linking eligible HIV infected pregnant women to ART.

Lessons learned: Attrition was high in many steps of the PMTCT-cascade. Factors that negatively influence the PMTCT-cascade are complex and related to social, cultural, institutional and technical aspects of life and health care. Targeting identified risk factors, such as late presentation, low male involvement, long travel to services, and limited program-integration should result in a more successful program.

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MOPE0863
Supporting the integration of HIV services in Zimbabwe: development of a toolkit
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Issues: Greater integration of PMTCT into maternal child health programmes is critical in the context of limited national resources. The extension of in-fant prophylaxis, inherent in the revised 2009 WHO PMTCT Recommendations, renders integrated follow-up care of HIV-exposed infants increasingly important. While Zimbabwe has evidence of a good model of integrated care, national expansion of the approach is limited due to the lack of tools to support this.

Description: A successful national pilot project has facilitated identification of steps for strengthening integrated HIV follow-up services. This led to the development of a user-friendly toolkit aimed at preparing policy makers, health-
care workers and communities to provide a complete package of integrated services. The toolkit acts as a practical guide on how to strengthen integration processes and covers 6 important implementation steps including: designing and pre-testing; advocacy; human resources; logistics; service delivery; and monitoring and evaluation. The toolkit was developed by a tool development group which then shared, for additional feedback, at a national stakeholders’ workshop. 

Lessons learned: Some of the critical success factors in developing this national toolkit include:

- Strong national leadership, with involvement at all levels and between different departments of the health service to promote ownership and adhere to national protocols.
- A comprehensive understanding of ‘why’ and ‘where’ the toolkit will be used is critical in the development process.
- Development of tools to enhance community participation are equally as important as tools for health service providers.

Next steps: Further input is required to determine its usability, address its weaker aspects whilst maintaining the project to a manageable size. The content will be further revised to address the needs of both healthcare providers and communities. An optimal design for the toolkit has yet to be identified. The toolkit development process can be used to guide the development of other national tools.

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MOPE0864
Two way referral model of scaling up PMTCT services in the context of HIV/AIDS care: the experience of TASO Uganda, Mbale Centre

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Issues: Mother-to-child transmission of HIV (MTC) is the second leading mode of HIV transmission in Uganda, accounting for 19% of HIV infections. In 2005, 35% of pregnant women in Uganda received antenatal counselling on the prevention of mother-to-child transmission of HIV (MPTCT) while 20% received an HIV test; only 15% of women living with HIV were identified and 10% of them accessed prophylactic antiretroviral drugs for PMTCT (Ministry of Health, 2005).

Description: The core function of The AIDS Support Organization (TASO) is HIV & AIDS care. AIDS CareScale-Out (ACSO) PMTCT services to its clients, in line with national policy and in support of national efforts to reduce HIV infections by 40% in the five years, 2008-2013. TASO implements a programme that provides a two way referral of clients to and from public health facilities; it provides support to clients, provides prophylactic and HAART, and refers clients to deliver at health facilities. Health facilities in turn refer clients back to TASO in need of care. Follow-up of pregnant clients is done by TASO and public health workers.

Lessons learned: Specific MPTCT clinics at facility and community outreach facilitate increased access. Further, PMTCT has led to: increased disclosures of pregnancies, improvement in health facilities deliveries; increased uptake of Family Planning methods by People Living with HIV (FLHV); better adherence to treatments by clients due to increased knowledge; improved partnership between TASO and health facilities and reduction of vertical transmission of HIV from 14% to 4% (TASO MS 2009).

Next steps: TASO plans to strengthen monitoring and evaluation of PMTCT services. Family Planning to prevent pregnancy, logistical planning to purchase consistent supply of ARVs, and improve screening of children for HIV, client follow up and referral.

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MOPE0865
Early infant diagnosis of HIV in Zambézia Province, Mozambique: challenges in the 1st year of a rural program

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Description: From 2006-2008, Ministry of Health and UNAIDS adopted Early Infant Diagnosis (EID) for all mothers and newborns with negative test result in Mozambique. EID services were introduced in the 114 health centers in 2007 and in the 104 health centers in 2008.

Mothers and newborns were referred from public health facilities to TASO for ARV prophylaxis. In 2008, 76% of referred mothers received ARV prophylaxis for 6 weeks in a PMTCT integrated model sites versus 3 stand alone site.

Results: Between January 2007 and June 2008, 443 women tested positive for HIV during pregnancy. Of these, 11% of mothers and 14% of newborns were referred for EID tests. In total, 95% of women tested for EID were found to be HIV positive.

Conclusion: Since 2004, UNFPA and the Department of Health (DOH) intensified HIV-prevention efforts to pregnant women through male involvement in maternal care. Six MCH hospitals, followed by community and general hospitals spearheaded this intervention. In phase I (2004-2006), the MCH-hospitals involved male partners in antenatal care (ANC) and family planning (FP), and referring clients to ARV prophylaxis for 6 weeks after delivery. The MCH project has successfully reached more pregnant women and partners in villages/communities through active enrollment by village health volunteers. This project links SRH and HIV prevention, care and support for maternal

MOPE0867
Involving male partners in maternal and child health care to improve HIV-prevention in Thailand

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Description: Since 2004, UNFPA and the Department of Health (DOH) intensified HIV-prevention efforts to pregnant women through male involvement in maternal care. Six MCH hospitals, followed by community and general hospitals spearheaded this intervention. In phase I (2004-2006), the MCH-hospitals involved male partners in antenatal care (ANC) and family planning (FP). MCH project was extended to involve community health centers and primary health care (PHC) units, and successfully reached more pregnant women and partners in villages/communities through active enrollment by village health volunteers. This project links SRH and HIV prevention, care and support for maternal

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health through ANC, FP, PHC, and HIV Counseling and Testing to increase universal access to care.

Lessons learned: The shift in the program’s promotional focus from HIV-prevention to building a healthy family has increased male involvement at all service delivery points. Couple-counseling has increased confidence of partners to disclose their HIV-status. The linkage of SRH and HIV has improved quality of care, decreased duplication of efforts, reduced competition of limited resources, and better utilised the scarce human resources of health-personnel.

Next steps: By 2011, UNFPA and DHI aims for the national agenda’s adoption of the integration of scaling-up of the interventions.

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MOPE0868
Can integrated mother-and-child health care improve survival of HIV-exposed infants?

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Background: Follow-up of HIV-exposed infants remains challenging in many Sub-Saharan countries. Integrated antenatal services have contributed to improved care for HIV-positive pregnant women. Similarly, integrated care for mother and infant after birth could improve follow-up of HIV-exposed infants.

We present intermediate results of an ongoing study testing viability of such integrated care, and its effect on follow-up of HIV-exposed infants, in Tete Province, Mozambique.

Methods: An intervention-control study in three pairs of public health centres, selected on size and accessibility, with random allocation of one of each pair to the intervention group, was started in mid 2009. The intervention consisted of the integration of services for antenatal care for mothers and children under five years of age. Routine clinical statistics on PMTCT, follow-up of HIV-exposed infants and other MCH activities were collected over the year before and six months after starting the intervention, during monthly supervision visits of key informants at the centre.

Quantitative data were analysed with Microsoft Excel, while thematic analysis of qualitative data was done manually.

Results: Integration of care for mother and child was feasible in all health centres, though structural difficulties hindered implementation in the larger clinics. Infant follow-up was positively received by all staff. In the intervention group a marginal increase was seen in the number of HIV-exposed infants registered and tested in the follow-up program. Frequent absenteeism of staff and irregular supplies of consumables restricted health centre performance in both intervention and control groups.

Conclusions: Integrated care for mother and child is feasible and acceptable in public health centres in Tete Province, Mozambique, and possibly in similar settings elsewhere. However, its potential to improve follow-up of HIV-exposed infants was not yet realised in the first six months of this study, due to health system limitations such as staff absenteeism and inadequate logistics.

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MOPE0869
UNICEF-WHO2009 expert consultation to define the highest priority operational research (OR) questions for the prevention of mother-to-child transmission (PMTCT) and paediatric HIV care, support and treatment (CST)

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Background: To define the highest priority OR questions to be addressed and guide the rapid scale up of PMTCT and Paediatric HIV CST, UNICEF and WHO organized an expert consultation in Washington DC, September 2009. More >70 representatives from international and donor organizations, governments, highly impacted countries, implementing organizations, foundations, and academic institutions participated.

Methods: The four OR focus areas were: 1) Maximizing PMTCT Effectiveness; 2) Paediatric HIV CST; 3) Integration of PMTCT and Paediatric HIV CST within Broader Maternal, Newborn and Child Health (MNCH) Programs; and 4) Health Systems Strengthening in the Context of PMTCT and Paediatric CST.

A summary of an extensive OR literature review of nearly 300 peer-reviewed manuscripts and abstracts was presented along with gaps in knowledge. Work Groups (WG) for each focus area identified their five highest priority OR questions and then scored each question on its Answerability, Usefulness, and Potential Impact.

Results: The highest priority OR questions for each of the WGs were: Wg1 #1) effective strategies for CD4 testing and, if eligible, provision of antiretroviral (ARV) treatment for pregnant and breastfeeding women (score 10.9); Wg2 #2) optimal delivery model for care and treatment of HIV-infected infants and children (score 9.1); Wg3 #3) feasibility and impact of integrating HIV TC and care for HIV-exposed infants into MCH services (score 9.3); and Wg4 #4) impact of task shifting/sharing on PMTCT and Paediatric CST scale up (score 9.5).

Overall, the highest priority questions were from Group1 on CD4 testing and ARVs (score 10.9), effective strategies for postpartum prophylaxis (score 10.2), and the feasibility and impact of providing ARV treatment in antenatal settings (score 10.1).

Conclusions: UNICEF, WHO, partners and national governments will work to encourage the development and funding of protocols to address these high priority OR questions on PMTCT and Paediatric CST.

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MOPE0870
The operational research process of the Latin American and Caribbean initiative for the Integration of prenatal care with the testing and treatment of HIV and syphilis

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Issues: As a component of the Latin America and Caribbean Initiative for the Integration of Prenatal Care with the Testing and Treatment of HIV and Syphilis (LAC-IPTT), we conducted an operational research (OR) to guide the implementation of the integration of prenatal care with the testing and treatment of HIV and syphilis in Peru and the Dominican Republic. ILAP brings together the expertise of national AIDS programs, public health decision-makers, clinicians and international institutions (UNICEF, UNAIDS, PAHO) with rigorous OR (Harvard Medical School); it works in coordination with the regional initiative for the Elimination of Mother-To-Child Transmission of HIV and Congenital Syphilis in Latin America and the Caribbean.

Description: The OR combines medical anthropology, epidemiology, and health policy analysis to understand: the organizational structure of the national programs on AIDS and prenatal care; health services monitoring systems; prevention and treatment protocols; structure of the national laboratory network; training programs on testing and treatment for HIV and syphilis; allocation of resources; insurance and cost-recovery mechanisms. This situation analysis aims to identify strengths and weaknesses at the national and local levels.

Lessons learned: Based on the evaluation of the research findings, a team from Peru and the Dominican Republic delineated a detailed plan of action for each country aimed at universalizing routine testing and treatment of HIV and syphilis during pregnancy and to measure the impact of these interventions. Although each plan of action was country-specific, their collaborative work through ILAP allowed the sharing of implementation strategies and problem solving.

Next steps: Implementation plans based on rigorous OR can improve early diagnosis and timely treatment of HIV and syphilis in women of reproductive age. The scale-up of a maternal, newborn and child health (MNCH) approach - MTCT of HIV and congenital syphilis, and prevent loss to follow up of women and children exposed to HIV and syphilis. The same mechanisms can be used to prevent and treat other STIs.

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MOPE0871
How has the scale-up of HIV/AIDS services influenced other priority health care services?

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Background: There is relatively little empirical evidence available on how disease-specific global health initiatives (GHIs) influence other health services and health systems in recipient countries. The aim of the study was to assess the effects of the scale-up of HIV/AIDS services on the readiness to provide primary health services in Ethiopia.

Methods: Baseline and follow-up facility and health worker surveys were conducted among a stratified and age-stratified sample of health care facilities in four regions. The baseline was conducted in 2004, prior to the scale-up of HIV/AIDS services, and the follow-up surveys were conducted in 2006 and 2009. Changes over time were measured for several indicators thought to be attributable to the scale-up, including human resources (staff number and composition, in-service training, supervision, time allocation, and motivation), service delivery and medical products - all identified by the WHO as building blocks of a health system. In addition, the empirical data were supplemented with information gathered through 96 structured in-depth interviews of key informants at the national-, regional-, and district-levels.

Results: From 2004 to 2009, the average number of health workers per sample government facility increased primarily due to the introduction of new cadres...
res of health workers and the expansion of nursing training. Supervision and several dimensions of health worker motivation also significantly increased, deployment of supervisors remaining consistent with their reported requirements. On average, infrastructure and the availability of laboratory services improved over the study period, but the availability of essential drugs and working equipment did not change. GHIs have supported broad sector-wide human resources and routine information strategies that had not yet been introduced in the study facilities in 2009.

**Conclusions:** HIV/AIDS-focused GHIs have played a significant role in Ethip- oni and Matlab and have stirred several positive changes that can strengthen other priority services and the health system as a whole.

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**MOPE0872**

How do the presence and extent of ARV services affect other health services in the health system? Evidence from Mozambique

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**Background:** Large amounts of money have been spent to fight the HIV/AIDS epidemic in Africa. Recently a strong effort has been done to scale up Antiretroviral Therapy (ART) services in African countries. This has caused large debate in whether or not local health systems are prepared for this extra effort and what will be its impact on other health services.  

**Methods:** This study analyzes quantitatively this issue using data from two waves of a health facility survey conducted in Mozambique in 2007 and 2008 in four provinces and Maputo City. The survey collected information on the characteristics of the health facilities as well as opinions of workers and pa- tients.  

**Main findings:** Multivariate regression analysis was used to measure the impact of the presence and amount of ARV services on some of the other services provided by the health facility.  

**Results:** We find that waiting times and time spent with doctor are not sig- nificantly affected by the existence of ART service in a given health unit, and do not vary significantly with the amount of ART patients in treatment. By the same token, the number of patients in the other services provided by the health facility.  

**Conclusions:** For the Mozambican case it seems that the health system is dealing well with the increasing provision of HIV related services. No negative consequences for other patients were identified and the treatment of other conditions is taking place at previous levels. However, there is no sign of posi- itive spillovers either.

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**MOPE0873**

AIDS donors and sexual and reproductive health: removing barriers to integrated service delivery in Mozambique, Uganda and Zambia

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**Background:** Despite billions of dollars of funding for HIV/AIDS, support for all of sexual and reproductive health (SRH) falls short of what is needed to achieve priority national health outcomes and the Millennium Development Goals. Review of the literature suggests that linkages between HIV and SRH can improve service accessibility, efficiency and quality for both programs. However, programs supported by major AIDS donors have not been effec- tively linked with SRH programs. Evidence from three countries shows how AIDS donors enable or create barriers to integrated service delivery between HIV/AIDS and SRH.

**Methods:** For three countries, desk review of existing linkages and donors policy and program documents from 2000-07, and 110 (total) semi-structured interviews with donor and government officials and program imple- ments. A cross sectional survey in Uganda of 700 health workers across 30 health facilities.  

**Results:** National and donor planning for HIV/AIDS and SRH have been kept separate through the incorporation of recent developments in Mozambique of a country led integrated approach. AIDS donors’ policies and funding have cre- ated programmatic silos limiting the capacity of health facility planners and managers to deliver a comprehensive range of SRH services. AIDS donors have supported HIV/AIDS specific health systems to avoid weak existing na- tional systems. This has complicated the work of district and facility managers by creating unbalanced staff remunerations, training opportunities, infrastruc- ture, equipment, supplies, and donor specific reporting requirements.  

**Conclusions:** Need, not donor priorities, should drive local level decisions about how resources are allocated within districts and facilities. AIDS donors should ensure they provide decision makers at these levels with the mandate and capacity to link HIV/AIDS and SRH services as needed. AIDS donors can facilitate linkages by engaging in donor level planning and policy setting at a national level, removing restrictions to integrated services, and coordinating funding for other national health plans.

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**MOPE0874**

Limited SRH/HIV integration an issue of limited policy implementation in Uganda

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**Issues:** The benefits of SRH and HIV/AIDS linkages and integration are glob- ally documented. This has translated into policy but comprehensive SRH/HIV programming and service delivery is in Uganda is heavily challenged.

**Description:** A 2009 rapid assessment of SRH/HIV linkages and integration reflected that key policies in the health sector and the multisectoral HIV/AIDS response are supportive of SRH and HIV/AIDS integration. There are however gaps between policy and practice attributed to: (1) poor policy dissemination and limited policy monitoring, (2) parallel planning and coordination struc- tures and processes within the Ministry of Health (3) un-coordinated national level planning where Uganda AIDS Commission leads multisectoral HIV plan- ning, and (4) unsupportive external and internal funding mechanisms. While integrated service delivery is feasible, the multiplicity of HIV/AIDS actors largely implement in a vertical mode with weak referral systems and parallel logistics and supplies chain management and monitoring systems; the Health Management Information System does not fully capture integration indicators and, there is underutilization of HIV specific funding, especially for health personnel due to lack of comprehensive tools and SRH commodities in HIV service points. Civil Society Organizations systems depict enhanced integrated programming and service delivery.

**Lessons learned:** SRH/HIV integration is largely constrained by poor policy implementation. Specifically structural and systemic factors constrain harmo- nized planning and coordinated implementation at different levels resulting in conflicts and/or compromised health facilities guidance at service delivery points. Social advocacy for integration is translating into actions at various levels. System- tic joint programming, coordinated integrated planning and sharing have been proposed instead of a system overhaul that is likely to be disruptive.

**Next steps:** A national SRH/HIV linkages and integration strategy has been drafted by the Ministry of Health with contributions from key stakehold- ers. Consensus on highlighted approaches is crucial for national ownership and commitment and will compel development partners to support policy implementation.

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**MOPE0875**

Building capacity to provide coordinated care for orphans and vulnerable children: twinning partnerships for training a new cadre of para-social workers in Africa

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**Issues:** Para professional workers are an untapped resource for ad- dressing the multisectoral needs of large populations of Orphans and Vulner- able Children. A new cadre of para social workers is being trained in case management to ensure coordination and comprehensiveness of care for OVC across multiple sectors of health, psychosocial, education, food, and economic support. Para social work trainees are volunteers, NGO and government work- ers.

**Description:** The American International Health Alliance, funded by PEPFAR, has facilitated twinning partnerships between established schools of social work in Tanzania, Ethiopia and Nigeria with US Schools of Social Work (Uni- versity of Illinois in Chicago and Hunter College New York) for development of curriculum and capacity building of African training institutions. Partners collaborate to develop a pre service curriculum of basic skills for a six month para social work training program that is completed by large numbers of Orphan and Vulnerable Children. A new cadre of para social workers is being trained in case management to ensure coordination and comprehensiveness of care for OVC across multiple sectors of health, psychosocial, education, food, and economic support. Para social work trainees are volunteers, NGO and government work- ers.

**Next steps:** Para-professionals offer an untapped resource in addressing OVC care in Africa. Sustainable programs are created by partnering with existing schools of Social Work. Strengthening the social service workforce is criti- cal in countries with large numbers of OVC and overburdened social welfare systems.

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MOPE0876

Needs and challenges of HIV counselors in supporting HIV-positive adolescents

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Issues: The role out of anti-retroviral therapy has made it possible for perinatally infected infants to get into adolescence thereby exposing their sexuality. It has been noted that the number of TASO registered HIV-positive adolescents has increased from 476 in 2005 to currently 753 in 2009. However, this trend has not mirrored in the skills, knowledge and attitudes that counselors possess. Counselors continue to handle adolescent issues using their child and adult counseling skills. A study was conducted among counselors in TASO Uganda in selected centers, aimed at understanding needs and challenges in supporting HIV-positive adolescents.

Description: A cross sectional survey was conducted in July 2009 among 44 counselors in the TASO centers of Entebbe, Bulu and Mugala. A self-administered questionnaire was given, focusing on the respondents’ challenges in adolescent counseling and the support they needed.

Lessons learned: Counselors reported that, the majority, (39.5%) of adolescents faced stigma and discrimination, 23.3% expressed fears and worries about their future, 18.6% were concerned about relationships and love while (4.7%) had difficulty with both sex/sexuality and growing up. The HIV counselors on the other hand were challenged by: failure for adolescents to open up (30%), inability to meet the adolescents’ expectations (16.3%), limited knowledge in Adolescent sexual and reproductive health (ASRH) (11.6%), and inadequate skills in adolescent counseling. (86%) Results suggest that there is a gap among TASO counselors in ASRH knowledge, and skills to support HIV+ adolescents.

Next steps: There is an urgent need to build capacity of counselors so that HIV+ adolescents may receive adequate support to make informed decisions regarding their sexuality and pursue their dreams.

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MOPE0877

Training needs and evaluation of a neuro-HIV training module for non-physician healthcare workers in Western Kenya

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Background: For neurologic conditions in resource-constrained settings is commonly delivered by non-physician healthcare workers. Because such locations usually have few neurologists, recent efforts to improve neurologic care have focused on providing neurology training to non-physician healthcare workers. Our objective was to assess baseline knowledge and comfort in treatment of neurologic conditions among non-physician health care workers in Western Kenya and evaluate the effectiveness of a neuro-HIV training module.

Methods: A one-day neuro-HIV training module emphasizing HIV-associated dementia (HAD) and peripheral neuropathy was provided to 71 nurses and clinical officers (nurse’s assistants) employed by Family AIDS Care and Education Services in Nyanza Province. Pre- and post-tests were administered to 55 participants.

Results: The mean age of participants was 29 years, 56% (31/55) were male, mean duration of care for HIV-infected patients was 2.4 years, 53% (29/55) were clinical officers and 40% (22/55) were nurses. At baseline, participants had significantly higher comfort in treating general medical versus neurologic conditions (p< 0.001). After training, participants correctly identified significantly more neurology etiologies (pre=5.6; post=8.0; total possible=9; p< 0.001). Only 4% (2/55) of participants at baseline and 6% (3/55) (p=0.11) post-training could correctly identify the HAD diagnostic criteria. Partially correct responses were given by 6% (3/55) at baseline and 33% (18/55) (p=0.03) post-training. Commonly reported incorrect HAD diagnostic criteria included abnormal level of consciousness (pre = 82%; post = 43%), hallucinations (pre=37%; post=15%), and history of CNS infection (pre=47%; post=30%). In qualitative comments, 26/55 (47%) participants requested longer or more frequent trainings in neurology.

Conclusions: Although healthcare workers felt significantly more comfortable in managing neurologic conditions at baseline, the training significantly improved knowledge of neurology but not misconceptions about HAD characteristics. Many participants requested additional training to improve knowledge. Further module refinement and expansion of similar neurology training programs are warranted in resource-constrained settings.

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MOPE0878

An innovative rural HIV/AIDS clinical training center in central China: building human resources for rapid scale-up of the National Free ART Program in rural settings

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Background: In 2009, an estimated 740,000 people were living with HIV in China and 105,000 had AIDS. In 2003, the “Four Frees and One Care” policy was initiated, and by 2008, over 52,000 patients were treated through China’s National Free Antiretroviral Treatment Program. Since 80% of AIDS patients live in rural areas, the health care system had a severe shortage of trained personnel. In 2004, the Lixin Rural HIV/AIDS Clinical Training Center was established.

Methods: Lixin and neighboring counties were heavily affected by HIV/AIDS, particularly among former plasma donors. The center trains rural, county-level hospital physicians through a three-month residency using outreach services, expert consultations and home visits. The Center has strong ties with local village, township and county governments.

Results: By December 2008, the Center graduated 72 physicians from 15 provinces. An evaluation at that time (76% response rate) showed 98% of graduates worked in HIV/AIDS care and treatment, managing 6,181 visits per month in collaboration with local health care workers among the 15,755 patients in their counties. Over half (56%) of respondents created guided and conducted monitoring and evaluation activities. A majority (67%) participated in secondary training, teaching 1,127 doctors and nurses organized by local governments. The Center links village, township and county HIV/AIDS services, providing and improving quality care and treatment.

Conclusions: The Lixin Rural HIV/AIDS Clinical Training Center has substantially increased human resources for AIDS treatment and care in China. Graduates play an important role in providing quality services in rural settings. However, rural Southwestern China’s HIV prevalence is increasing among injection drug users and female sex workers. A second Rural HIV/AIDS Clinical Training Center will open in 2010 in one of the most heavily affected counties focusing on these high-risk populations.

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MOPE0879

Democratizing implementation for sustainability - making the impossible possible: scaling up a quality life skills education (LSE) program for children in the state of Karnataka

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Issues: Most large children’s HIV programs are direct service welfare. But LSE (emotional, social learning, risk perception, coping with grief) is critical for OVC. The challenge is building capacity of village health personnel to deliver high quality child-participatory LSE programs in resource-limited settings. Our other challenge is scaling up to reach enough children for impact. Using an innovative Ripple training model, large numbers of grassroots workers learned and delivered children’s LSE program.

Description: KHPT’s Project SAMASTHA, works in 1,600 high HIV prevalence villages in Karnataka. The community-based care and support model uses community link workers (male-female pair for four villages) to deliver health and HIV services. Link workers also became LSE facilitators creating a community-based model for empowering orphans, at risk, HIV infected/ affected children (10-15 years).

SAMASTHA simplified FH-India’s LSE Toolkit for OVC into a Field and Operational Manual (FH/USAID SAMARTH support) appropriate for link workers’ educational level. At first Ripple, a national expert trained six Karnataka Master Facilitators (MFs) for ten days followed by 20 Ripple sessions, each session including children, on-site mentoring by national experts. With national expert mentoring, the MF similarly trained the second Ripple of link workers for 10 days; with 10 Ripple sessions. Trained link workers then became a third ripple, providing similar training, ripple sessions and on-site mentoring from both second and third Ripple link workers. These Ripples continued, a new Ripple of qualified MFs delivering the LSE program to the largest number of children for impact.

Lessons Learned: In two years, KHPT built the capacities of 125 village link workers and reached 877 children in 5 Ripple sessions with on-site mentoring support in the Ripple training model were critical for quality.

Next Steps: The experience will be useful to implement the much needed LSE activities for children on a large-scale by the National HIV/AIDS program.

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Author Index

Monday 19 July

Poster Exhibition

20 July

Tuesday 20 July

Exhibition

19 July

Monday

249
MOPE0880
Community health workers and HIV care in low- and middle-income countries: conceptualizing a diverse and complex phenomenon

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The health crisis in many low- and middle-income countries, sparked by se- vere health worker shortages, fragile systems and the HIV/AIDS pandemic, has led to an unprecedented proliferation in the use of community health workers (CHWs) for the delivery of primary and community care services generally and HIV services more specifically. This presentation will interrogate the currently existing research evidence on the roles and functions of CHWs in HIV programmes and their impact on health systems and capacity more generally. It will argue that current research and analysis is conceptually blunt and homogenizes diverse and complex so- cial and systems phenomena. We currently discuss CHWs within the Brazilian Family Health Programme, where they work in close collaboration with doc- tors and nurses, as fundamentally the same phenomenon as Health Extension Workers in Ethiopia who independently provide the first level of health care in remote areas, and as community carers emerging from HIV self-help groups. This confabulation has historical roots, but in today’s context muddies policy and academic debates and masks the urgent need to systematically engage with and develop models of community-based, integrated and continuous HIV care which is locally appropriate and responsive, and makes use of locally available resources in ways that are not exploitative but build human and social capital. The presentation will argue that programmes which utilise and strengthen lo- cally available human resources are not only the most effective form of investment, since the alternative in reality is NO care for many communities, particularly in per- ipheral areas. They have the potential to be building blocks towards sustain- able and equitable health care systems. This does not mean, however, that resources for health services can be delegated to fragile communities. In fact, a grave danger to access, quality and equity lies in conflating discourses of community involvement with responsibility for essential health services. Presenting author email: ulehmann@uwc.ac.za

MOPE0881
Is our technical assistance making a difference? Monitoring institutional capacity-building efforts with local NGOs in Tanzania

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Issues: Significant resources are expended to build the capacity of local NGOs. However, institutional capacity-building remains an underdeveloped area of M&E: staff receive little guidance in conducting assessments and or- ganizations often remain unclear about the reason for, or the basis of, the as- sessments. To address these issues, CHAMPION, a male involvement project in Tanzania, developed a technical performance in key technical areas to monitor changes in capacity and the effectiveness of its own assistance.

Description: Staff identified key technical performance areas critical to the success of the project, including: 1) gender-based programming, 2) male-friendly services, 3) curriculum-based education, 4) peer education, 5) advocacy, and 6) community engagement. Key documents in the public health literature—both published and “grey”—were reviewed to identify the essential characteristics of successful programs in each of the programmatic areas. These standards were then transformed into an indicator monitoring tool that includes: 1) an operational definition of the standard, 2) rationale, 3) potential data sources, 4) a rating system and 5) technical assistance options. The performance standards tool was field-tested with CHAMPION’s NGO part- ners.

Lessons learned: The tools were found to be of use to 1) establish a baseline of performance and to identify technical assistance needs of an organization, and 2) provide guidance to CHAMPION staff and implementing partners, help- ing them to identify key areas for monitoring and for improving the quality of programming.

Next steps: Based on these findings, the tool will help to evaluate, over time, the effectiveness of technical assistance by monitoring the number of indica- tors (or standards) that have been met since baseline. In addition to revisions of this quantitative tool, the importance of the quality of relationships estab- lished with local partners will be highlighted in achieving a common, useful and mutually beneficial understanding of institutional capacity-building.

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MOPE0882
Transitioning lay health workers to qualified health care workers: the experience in Free State province, South Africa

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Issues: HIV programmes in resource-limited settings have used lay workers (LW) as a means of addressing shortages of skilled health workers (HW). In spite of their important contribution to health service provision, some govern- ments have yet to formally adopt LW into the human resource structure of national health systems even with severe shortages of HW in remote rural areas, such as in the Free State.

Description: Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) supports the Free State Department of Health (FS-DOH) with monthly stipends for 50 lay counsellors and trained home-based carers at the National Hospital. A request by hospital management for EGPAF to support additional stipends prompted discussions with the FS-DOH to train LW to become enrolled nursing assistants (ENAs), and subsequently employees of FS-DOH. Thus FS-DOH is piloting a full-time one-year training programme in collaboration with the Free State Nursing School to facilitate this transition. 30 of 50 LW, mostly females, were selected using South African Nursing Council criteria to start the training program. The first batch of trainees will graduate in August 2010.

Lessons learned: The FS-DOH anticipates that transitioning LW will represent a cohort of ENAs who are better suited for the OWH programme due to their previous experience in caring for HIV-positive clients. The pilot will help assess the feasibility of transitioning LW to clinical health cadres through capacity building using an accredited training programme.

Next steps: FS-DOH proposes to evaluate the pilot after the first graduates and expand the programme subject to recommendations and availability of funding. Other DOH should collaborate with training institutions to address HW shortages through innovative strategies that maximize the experience of lay workers and build on existing skills. Transitioning LW to more skilled cad- res is a step beyond task shifting, increasing the available human resources for health.

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MOPE0883
Effect of community health worker supplementation to ART delivery on HIV patient survival and retention in resource-poor, post-conflict Liberia

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Background: Provision of anti-retro viral therapy (ART) alone in resource- poor and post-conflict settings is often insufficient to achieve desired out- comes. Great need exists to evaluate effects of community-based interven- tions on retention in care and survival.

Methods: We performed a retrospective cohort analysis at a rural HIV clinic in southeastern Liberia. Patients on ART were offered food and transport sup- port when available. At their second visit, patients living in the hospital district were offered community health workers (CHWs) for home-based supervised ART and psychosocial support. Participants unable to obtain CHWs because of location, limited program resources, or refusal served as controls. We per- formed Cox proportional hazards regression to analyze the effect of CHW support on the risk of treatment failure, defined as death or default, or refusal. Analyses were adjusted for potential confounders identified in previous literature or multivariate analysis. The project was approved by TB committees at Harvard University and the Liberian government.

Results: From March 2007 through August 2009, 372 HIV-positive patients were enrolled. The cohort was 77% female, 100% of black African race, 62% WHO clinical stage III-IV, and 15% TB co-infected. Approximately 34% of patients received CHW support. ART and eligible for CHWs (n=118), median follow up time, defined as days from second visit to death or last clinic visit, was 171 days. Twenty-one patients (17.8%) were confirmed dead during follow-up, and 23 (19.5%) defaulted. CHW receipt was associated with a 60% decreased hazard of failure (HR=0.40, p=0.08). Additional factors with significant association were increased baseline weight (HR=0.92 per kg, p=0.006), TB co-infection (HR=0.31, p=0.005) and female sex (HR=0.44, p=0.10). Age, distance to clinic, and expansion of CHWs were selected using South African Nursing Council criteria to start the training program. The first batch of trainees will graduate in August 2010.

Lessons learned: The tools were found to be of use to 1) establish a baseline of performance and to identify technical assistance needs of an organization, and 2) provide guidance to CHAMPION staff and implementing partners, help- ing them to identify key areas for monitoring and for improving the quality of programming.

Next steps: Based on these findings, the tool will help to evaluate, over time, the effectiveness of technical assistance by monitoring the number of indica- tors (or standards) that have been met since baseline. In addition to revisions of this quantitative tool, the importance of the quality of relationships estab- lished with local partners will be highlighted in achieving a common, useful and mutually beneficial understanding of institutional capacity-building.

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MOPE0884
Staff attrition in Zambian NGOs: why aren’t they staying?
M. Nyumbu, M. Chikuba, R. Lungu, S. Mutonyi
Support to the HIV/AIDS Response in Zambia (Share), Workplace, Lusaka, Zambia
Issues: Retaining qualified staff in national health institutions in Zambia has long been a challenge for the government. Inadequate salaries, poor working environment, and insufficient training opportunities are some of the factors that contribute to this. Local NGOs working in HIV/AIDS programs have not been spared either. They compete from the same limited pool of qualified staff in the country. Lower salaries and the desire for new opportunities have contributed to staff moving from one organization to another, seeking better working conditions.
Description: Qualified experienced staff is key to successful program implementation. However, the inability to retain staff has been a hindrance to growth for some NGOs. Staff move from one local NGO to another or move to better paying NGOs directly supported by donors. Others even leave the country for better paying jobs. Some NGOs have lost up to 40% of their senior staff, paralyzing operations. Support to the HIV/AIDS Response in Zambia (Share), a USAID-funded project under PEPPAR, subgrants to NGOs to carry out HIV/AIDS workplace programs. ShareA has built systems and capacity among these NGOs to enable them run their organizations efficiently and increase retention.
Lessons learned:
1. NGOs with more than one funding agency are more likely to retain their staff.
2. Adequate grants should be given to NGOs to enable them to offer better conditions.
3. Staff need adequate compensation and a sense of belonging to the NGO.
4. Sustainability and staff retention systems should be built in NGOs.
Next steps:
1. Narrow the gap in service conditions between NGOs directly supported by donors and local NGOs with limited resources.
2. Donors should agree to rules that prevent donor-funded NGOs from poaching staff from local NGOs.
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MOPE0885
STAR Awards - the effect of a non-monetary team-based-incentive system on staff performance in a prevalence setting in Malawi
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Issues: In a high HIV prevalence setting Malawi’s health system suffers from very low levels of skilled human resources for health (MHH). In Thyolo district, with an adult HIV prevalence of 21%, doctor/nurse population ratios are 1.53/24 per 100 000 population respectively. Low staff motivation and morale (only 15% ‘very satisfied’ with overall working conditions) has been identified as a contributory factor in these shortages and the area of incentives and performances appraisal remains neglected.
Description: MOH and MSF developed a non-monetary team based incentive scheme called STAR Awards to appraise performance levels, reward good performance and assist improvement in poor performers. Relevant performance indicators were developed measuring quality and quantity of essential health services at health centre and community level and integrated in the regular quarterly supervision rounds.
Lessons learned: STAR Awards implies a positive impact upon worker motivation and performance, markedly so in those areas which have been identified as area of improvement. Team morale has also benefited, particularly in winning teams, as expressed by the prominent display of trophies/ certificates and the coveted use of STAR Awards t-shirts. There are some concerns regarding fairness with respect to challenges that certain teams feel are beyond their direct control. Such a system must remain dynamic and adapt to staff/ management priorities and concerns to remain meaningful.
Next steps: Although paying sufficient salaries remains a primary factor in health worker motivation and retention, this non-monetary system could facilitate retention and further utilization of the existing work force for the purposes of ART scale up and general health care. With the current lack of suitable performance appraisal options for a low resource/ development context such as Malawi, STAR Awards, if refined for national implementation, can have a positive effect on the health sector at large.
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Adapting HIV programmes to systems with limited health care personnel MOPE0888-MOPE0893

MOPE0888
The Brazilian experience with a strategy to expand access to diagnosis of HIV infection
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Issues: Brazil has a concentrated-type epidemic of HIV infection and prevalence in the overall population is 0.61%. An estimated 255 thousand people in Brazil are unaware of their serological status. In spite of all the government’s efforts, the population still has difficulty getting access to prevention and diagnosis services. In 2003, in response to the problems described above, a mobile strategy was designed and implemented to expand access to diagnosis in the Brazilian public sector.
Description: In 2003, Brazil adopted the Get Wise (Get Wise) mobilization strategy was created in 2003 to stimulate and decentralize the diagnosis process and break down resistance to HIV diagnosis offered by health services. In 2008 the actions used Rapid Tests for diagnosis purposes. An agreement was made among federal, state and municipal spheres of health administration whereby the federal government took responsibility for distributing: tests, prevention videos, and communication and press material; and for the organisation of testing venues and referral of positive-diagnosed patients to public and private health reference services. Actions were meticulously prepared with adequate technical support and maximum respect for confidentiality and follow up. 14,453 test results were obtained with a detected prevalence of 0.91%. The data shows that all the Brazilian macro-regions unfolded at least one mobilisation event using Rapid Tests to diagnose HIV infection.
Lessons learned: Integral public policies for combating the HIV/AIDS epidemic must be associated to vulnerability contexts, and access to early diagnosis, prevention commodities and treatment. Activities directed at empowerment of state and municipal spheres need to be reinforced in this strategy.
Next steps: More Fique Sabendo mobilisations to continue expanding access to HIV infection diagnosis.
Ensure that actions are undertaken in an integrated manner by the three spheres of government to boost effectiveness and results.
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MOPE0887
Critical capacity needs to deliver effective HIV/AIDS responses in resource constrained settings: perspective of health care providers
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Issues: More than 50% of facilities had fewer than the recommended number of health personnel-medical and clinical officers, nurses, and midwives. 62% of the facilities had at least one nonqualified volunteer working on HIV/AIDS-related work. With the exception of HIV counseling and testing, the provision of biomedical HIV prevention, care, and treatment services varied greatly and ranged from 16% to 80% of the facilities depending on the type of service. The three most critical capacity/training gaps identified were laboratory investigations, rapid HIV testing (not counseling), and antiretroviral therapy. These gaps were more pronounced at health centers compared with hospitals. Less than one-third of lower cadre health workers and volunteers received HIV/AIDS-related training. Some respondents noted higher-cadre workers received multiple trainings.
Lessons learned: The results demonstrate the critical role of target recipients’ perspectives to ensure that interventions meet their needs. In Uganda, there is a need for increased training coverage of lower cadre health workers who deliver HIV/AIDS services; and health facility managers should be consulted when identifying appropriate training participants from their staff.
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MOPE0889
Evaluation of an onsite antiretroviral treatment continuing medical education course in Zambia
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Issues: HIV/AIDS care providers in Zambia have an urgent need to regularly refresh their knowledge without spending time away from their facilities. To cover this gap, Hpiego has developed and is implementing an innovative ART CME training package. This allows continuing reinforcement and education for the clinicians with basic training and provides efficient technical updates to this dynamic field.
Description: The ART CME is a Ministry of Health (MOH)-approved, six-month, 12-module (including initiation, adherence, TB/HIV, side effects) DVD course comprising paper-based tests and exercises on site-training based. The course employs a Performance and Quality Improvement (PQI) approach and helps providers transfer learning by addressing gaps in service provision while creating a forum for strengthening facility-level team building and continuous learning.
As of January 2010, 1389 providers have been enrolled from 72 ART sites;
Exhibition

Tuesday 20 July

Author Index

252

309 providers from 16 sites have completed it. Baseline data for the program evaluation has been collected from 47 sites and end-line data will be collected in April 2010. The evaluation is also at quality of care from the client perspective.

Lesson learned: Preliminary results show increased provider knowledge evidenced by average pre/post test scores increasing by 15% or more. The PQI process has lead to site improvements such as increasing the number of staff in the ART clinic, ordering and distributing more complete treatment charts and creating a separate waiting area for TB clients. The onsite approach is an effective way to deliver technical updates to ART providers in Zambia. This approach could be replicated in other low-resource settings with a high prevalence of HIV and a large rural population.

Next steps: The program will continue to be rolled out to ART sites with the assistance of the MOHR and plans to implement a similar program for PMTCT and Pediatric ART are under way.

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MOPE0889 Access to line two antiretroviral therapeutic regimens in low-resource settings: experiences from Cameroon

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Background: The paper provides a description and an evaluation of the processes for the distribution policies already implemented by the Cameroon government concerning 2nd line antiretroviral therapeutic regimens addressed to PLWHA, as well as of the cooperation mechanisms that are presently in place, its obstacles and challenges.

Methods: On site interviews performed before the relevant national institutions; data compilation acquired from semi-open questionnaires p and ex-hausive compilation of administrative and contractual documents employed to the setting-up of the Cameroonian HIV/AIDS Program. Results: Cameroon has the need of some 16% of the patients under 1st line HAART to migrate to more robust treatments, only 2% have access to them. This access was possible by means of an agreement between the Cameroonian government and the UNITAID/CHAI, wherein UNITAID provides the financial support, CHAI purchases ARV drugs and the national procurement and distribution of medicines is responsible for the storage and distribution at national level. This mechanism is confronted with some hindrances, such as logistics and transport problems and poor access to monitoring assyas and a shortage on the necessary financial and human resources to attend the whole public health demand

Conclusions: (i) Cameroon Public Health network still remain strongly dependant upon the operational mechanisms of international financing initiatives (ii) Local authorities and international financial agencies might take into account the strong complementarities between 2nd line ARV and monitoring tools, (iii) the necessary financial and human resources to attend the whole public health demand

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MOPE0890 Opportunities for e-learning in drug use treatment and HIV prevention in Russia

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Background: The growing HIV epidemic among injecting drug users (IDUs) in Russia creates a significant need among specialists in the field for timely access to professional updates and continuous education. Studies performed at various stages of the HIV epidemic in Russia by The National Research Center on Addictions have demonstrated a demand for additional knowledge on treatment and prevention issues related to IDUs. However, many public health professionals find it difficult to access training courses in the current educational system. Contemporary information technologies, and in particular e-learning approaches, provide potential solutions for the fast delivery of knowledge and training.

Methods: A needs assessment survey was conducted to identify key areas of interest among drug treatment specialists, to evaluate the readiness of the health professionals to undertake e-learning and to pinpoint priority topics for courses. The study was conducted in the Moscow, Tyur, Piksov, Chelyabinsk and Voronev regions among 261 respondents, aged 19 - 72 (Mean: 41.5; SD =13.3), 49% (128) of which were female.

Results: Only 40% of respondents had previously participated in trainings on drug use related topics. 79% of respondents have Internet access, either at home (67%) or in the workplace (23%), with 57% using the Internet at least once a day. Respondents identified the potential benefits of e-learning as: opportunity for professional development (71%), access to up-to-date information (57%) and electronic materials (57%). Overall, 55% of respondents expressed a desire to participate in e-learning courses. The topics most interest are: Contemporary drug treatment methods including substitu

tution therapy” (72%), “Methods of motivation” (33%), and “Involvement of IDUs in prevention programmes” (30%).

Conclusions: e-Learning is a highly promising way of providing HIV prevention education to Russian professionals. Drug treatment specialists are interested in using e-learning for professional development, but technical capacities need to be taken into consideration.

MOPE0891 Closing the gap: decentralized, patient-centred and integrated TB/HIV care in a rural region in Swaziland

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Background: Swaziland is a country hard hit by the combined HIV/TB epidemic where more than 26% of the population is estimated to be living with HIV, and TB/HIV co-infection rate is over 80%. DR-TB is increasing significantly, posing for ever greater demands on an already overburdened health system.

Description: Since 2008, MSF supports 17 large rural clinics, 2 regional health centers and a hospital in the Shiselweni region of Swaziland (estimated population 208,454), aiming to improve access to TB/HIV care through a decentralized, patient-centred model, with integrated TB/HIV management at one location and task-shifting nurses and nursing auxiliaries in the clinic and community. By April 2009, an estimated 2200 clients were treated through the decentralized clinics and 2,407 were HIV-positive. 1,971 PLWHA are currently on regular ART follow up across the 17 clinics, representing 26% of those on ART in the region.

Methods: Despite TB detection for DR-TB during the same time-period has improved from 58% to 87%, allowing enrolment of 2,593 patients, with 155 out of them diagnosed at clinic level. Finally, DR-TB-detection and treatment initiation doubled between 2008 and 2009, from 32 to 63 respectively.

Conclusions: Decentralized, integrated TB/HIV care with task shifting to nurses and expert clients has improved detection and access to (DR)-TB/HIV care in rural Swaziland. This approach may serve as an example for an accessible health system to the dual TB and HIV epidemic in a high burden country like Swaziland.

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MOPE0892 Assessing patient schedule and policy guidance at FPD supported ART-sites in South Africa

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Background: In South Africa, regarded as the epi-centre of the HIV/AIDS pandemic, compromised service delivery at ART clinics is exacerbated by un-scheduled patient visits leading to limited doctor-patient face-time. Current national policy is unclear about patient schedule beyond month 6 of ART. To maximize utilisation of scarce clinic and financial support, donors should provide guidelines to support the development, defined by national policy, for stable patients who have been or six months or more on ART. In December 2009, FPD surveyed practices at its supported sites to assess uniformity regarding: patient visits; operations and policy; and clinic staff receptiveness towards the proposed schedule.

Methods: FPD administered a questionnaire by telephone to 13 ART doctors at 11 hospitals and two PHCs from a sample of 19 out of 58 supported sites, stratified by province and site type.

Results: Operations were inconsistent across sites while guiding policy ranged from national-, province-, and district-, to site-defined. Although doctor-patient contact sessions ranged from five to 13 times in year 1 of ART, the pattern was uniform at initiation and months 6 and 12. Drug supply was monthly during months 1-2 at all sites, switching to bi-monthly support after month 3, 62% sites shifted to bi-monthly supply and 20% to tri-monthly, and 50% of sites shifted some doctors’ responsibilities to nurses. Doctors indicated that: a 10-15 minute consultation is standard and acceptable; nurses could shoulder some doctor responsibilities; and a 6-month drug supply is an option for stable patients.

Conclusions: Growing patient enrolments, high patient retention and un-scheduled patient visits overwhelm scarce clinic staff, operational capacity and negatively impact quality care. FPD recommends the establishment of a standard system under national policy aimed at: decreasing patient load; increasing individual consultations; and funding the establishment of booking procedures for stable patients after month 6 of ART.

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XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria
Background: Measurement of body weight is an easy-to-use parameter for the follow-up of patients on ART in resource-limited settings. This study was conducted to a) determine the proportion who manifest weight loss after one year of ART, b) examine the association between weight loss and a number of key variables, c) assess the validity and predictive values of weight loss to identify patients with lipoatrophy.

Methods: Analysis of program data of 629 ART-naive adults on uninterrupted stavudine-based ART for ≥1 year at two health centers in Kigali, Rwanda. Multivariable linear regression was used to identify key determinants of weight evolution: virological failure (viral load >1000 copies/mL), adherence, CD4 cell count, and lipoatrophy (using a Lipodystrophy-Case-Definition Study-based questionnaire).

Results: Weight loss after the first year of ART was seen in 62% of all patients (median weight loss 3.1 kg/year). In multivariate analysis, no significant associations between weight loss and virological failure or adherence were seen, while higher on-treatment CD4 cell counts were protective. Weight loss was significantly associated with lipoatrophy (adjusted effect/kg/year -2.0 kg, 95% CI -0.6,-3.4 kg; P< 0.01, see figure). Weight loss that was persistent, progressive and/or chronic was predictive of lipoatrophy, with a sensitivity and specificity of 72% and 77% respectively, and positive and negative predictive values of 30% and 95%.

Conclusions: In a resource-limited setting, assessing weight is a routine clinical procedure that could be used to identify individuals at high risk of lipoatrophy after one year on stavudine-containing ART.

Effect of training, mentoring, and supervision on HIV processes and outcomes

MOPE0894-MOPE0900

MOPE0894

The AIDSRelief mentorship program in support of implementation of HAART in faith-based hospitals in Kenya: the supply chain management component

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Issues: Kenya faith-based hospital networks are often sole providers of healthcare coverage in rural and hard to reach areas. Since 2005, the AIDSRelief Program has assisted 29 faith based hospitals in Kenya to enroll more than 65,000 patients on ART treatment and care. At inception, the supply chain management (SCM) system was largely either nonexistent or rudimentary. Mentorship enabled most hospitals to maintain an uninterrupted supply of ART drugs.

Description: The AIDSRelief program has 3 Health Supply Chain Specialists (HSCS) who provide mentorship for hospital pharmacy staff on SCM: forecasting, quantification, pharmaceutical management information systems, inventory management, appropriate storage, and rational use of ART commodities. The HSCS teams made a minimum of three technical assistance visits per year to each hospital. These visits comprise documentation of standardized operating procedures (SOP), problem-based training, and cross-learning experiences. During the month of November 2009 a questionnaire was administered at each site. Data from the questionnaires and HSCS observations were triangulated to gauge SCM efficiency.

Lessons learned: Focused technical assistance, findings revealed 96% (28) of facilities had bin cards for all drugs, 50 % pharmacy staff competence in electronic prescribing tool, 83% of staff trained in stock out, 88% (26) facilities had requisite inventory management documents, timely complete reporting 83%(24), with 92%(27) facilities reporting monthly stock inventory review. Only 13% (4) facilities reported stock outs and drug expira- tion, 50% (15) of facilities had SOP for key supply chain functions. Thus, the survey revealed positive impact of the SCM system mentorship program.

Next steps: SCM mentorship has significantly improved provision of uninterrupted supply of ART at these faith-based hospitals; however, there’s need to establish SOP for all key SCM system processes within the institution. Maximum achievement of this goal will significantly advance efforts toward sustainability of HIV/AIDS care and treatment programs.

MOPE0895

Outcome evaluation of mildmay training on human resource capacity development for HIV/AIDS palliative care in Uganda

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Background: HIV prevalence in Uganda, stagnated at 6.4% for almost a decade continues creating training gaps for HIV/AIDS careakers. Mildmay Uganda (Mu) an HIV/AIDS care and treatment program in Uganda, has trained 3 Health Supply Chain Specialists (HSCS) who provide mentorship for hospital pharmacy staff on SCM: forecasting, quantification, pharmaceutical management information systems, inventory management, appropriate storage, and rational use of ART commodities. Over 14,000 people had been trained since 1998. An evaluation was performed to provide feedback on applicability of trainings offered between 1998 and February 2006.

Methods: Randomly, 332 participants were selected with 95% response. Four focus group discussions (FGDs) of 8-10 participants of trainees of the same course at the same time were conducted. There were 291 and 41 in-service-supervisors respectively. 35% of all FGD participants also completed a survey. Participants included 110 nurses, 34 clinical officers, 29 counselors, and 14 doctors working in HIV/AIDS care service centers representing 21 rural and urban districts.

Results: Seventy one percent attended the 1-3 weeks trainings, 22% the 9 months mobile modular program in HIV/AIDS palliative care and management, 7% the 18 months systems approach to HIV/AIDS Care and Management course, 90% reported acquiring skills applicable to their professions, 52% organized similar trainings in their communities, 42% participated in writing HIV/AIDS care funded projects. FGDs reported career progression, 52% organized similar trainings in their communities as primary benefi ts. However, there was expressed frustration due to lack of resources for drugs and testing kits in some facilities and diffi culty obtaining cooperation from non-trained colleagues.

Conclusions: Gained knowledge and skills were applicable and improved quality of care and life for PLWHAs in the communities.

MOPE0896

Issues and lessons learned from a model to improve pharmaceutical services in TASO, an HIV care and treatment program in Uganda

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Background: The AIDSRelief program has assisted 29 faith based hospitals in Kenya to enroll more than 65,000 patients on ART treatment and care. At inception, the supply chain management (SCM) system was largely either nonexistent or rudimentary. Mentorship enabled most hospitals to maintain an uninterrupted supply of ART drugs.

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Next steps: SCM mentorship has significantly improved provision of uninterrupted supply of ART at these faith-based hospitals; however, there’s need to establish SOP for all key SCM system processes within the institution. Maximum achievement of this goal will significantly advance efforts toward sustainability of HIV/AIDS care and treatment programs.

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Improving HIV/AIDS care in Central China: training community health workers to monitor treatment adherence and health of pediatric HIV/AIDS patients

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Background: HIV-positive children in former plasma donor communities in central China are at serious risk for treatment failure, drug resistance, opportunistic infections, and death.

Methods: The Pediatric HIV/AIDS Treatment Support (PATS), in partnership with local NGO, Fuying AIDS Orphan Salvation Association, and the local Ministry of Health (MOH), has implemented a community health worker (CHW) program to improve care for and drug adherence among children living with HIV/AIDS in Anhui and Henan, China. CHWs were trained by local MOH HIV/AIDS doctors in basic adherence support, HIV/AIDS epidemiology, and general healthcare. CHWs regularly visit the children to monitor adherence and health, educate caretakers and children about HIV/AIDS, provide nutritional support, and coordinate care with doctors and health clinics. Measures used to monitor adherence include routine pill counts, CD4 cell counts and viral loads obtained from local doctors. CHWs maintain standardized records of health information and notify doctors of any health irregularities following home visits.

Results: CHWs are critical to providing comprehensive care to the 16 HIV-positive children in the pilot program. Links with local doctors and the health system have been strengthened and educated caretakers play an important role in treatment support. During the pilot year antiretroviral adherence was 97.5% and there were no new cases of drug resistance and deaths. An increase of 282.3 CD4 cells (p=0.018, paired t-Test) was observed for children on antiretrovirals with ≥2 CD4 tests (n=8).

Conclusions: A CHW program, which is a novel approach to HIV/AIDS care in China, expanded on MOH services for effectively improve health outcomes among the 16 HIV-positive children. The program has since expanded to include 36 children; however, further resources are required to enroll additional children with HIV/AIDS who live in isolated regions where access to health care is severely limited and participation in the program could have great benefits.

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Evaluation of outcomes of the Baylor-Uganda Clinical Mentorship Program

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Background: Balasahayoga program aims to improve the quality of life of children infected and affected by HIV/AIDS and their families in the state of Andhra Pradesh in India. It has implemented Nurse mentoring program in the HIV/AIDS community care centres to strengthen the capacities of Nurses in the CCAs through Systematic capacity building and by improving the linkages between community and facility based HIV/AIDS services. It has undertaken this program through continuous mentoring, supportive supervision by a Nurse mentor and by developing 24 and by implementing proper documenting procedures.

Method: A baseline assessment was conducted to evaluate the knowledge and practices of 46 nurse mentees and the system capacities at 11 Community Care Centers. Two assessment forms (Forms A & B) were completed by nurse mentors grading mentees on general HIV knowledge and their demonstration of nursing skills. A third Form (Form D) was filled by mentees to rate mentors on the mentor’s knowledge, competencies and attitudes.

Results:

Conclusion: The assessment identified the lack of nursing and medication documentation as one of the problems of CCAs. It also indicated a need for improving nursing practices and existing systems. Nurse Mentors received good response, with mentees being confident with their mentor’s skills.

An analysis will be conducted in the next quarter to help assess the effectiveness of the program, anecdotal evidence shows the improvement in quality of care and appropriate drug administration as a result of contribution by the nurse mentors.

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MANAGING HIV SUPPLY CHAIN CHALLENGES WITH LIMITED RESOURCES: THE EXPERIENCE OF NAZARETH MISSION HOSPITAL, CENTRAL PROVINCE, KENYA

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ISSUES: The campaign to achieve universal access to Anti-retroviral therapy (ART) has strained human, infrastructural and logistical resource capacity in Kenya. Nazareth Hospital has employed innovative approaches to assure patients access to medicines at the main hospital (MH), 8 satellites and the community. We intend to document that pharmaceutical services can be carried out successfully in resource limited settings despite inherent challenges.

DESCRIPTION: Nazareth Hospital has 3700 patients on ART being served in the MH, 8 satellite clinics and in the community. The pharmacy is manned by 4 pharmacists, 3 pharmacists (PT), 2 administrative staff, 1 pharmacist technician (PT), Challenge envisaged include; inadequate personnel, far-flung satellite clinics, unaccountability for medicines, lack of bus fare. In 2009, the PT proposed a three pronged strategy. One computer was used for management of stocks and dispensing at the MH while the PT were trained. The clinical officers/nurses were trained on inventory management. Daily Activity Register (DAR) and Requisition Books (RB) were prepared for each satellite. Once a week the clinical officer/Nurse fills in a requisition list for the PT. Drugs are filled by the PT and the requisition is signed by both. At the clinic, the nurse dispenses and makes entries in the DAR while the nurse counts and countersigns the RB. The 2 nurses are returned to pharmacy where DAR entries are entered in the computer. The community was divided into regions each under a community nurse. The community nurse has a drug kit and records transactions in a DAR after home visits. The kit is refilled weekly and DAR records fed into the computer weekly for monitoring.

LESSONS LEARNED: With proper checks and guidance, medicines are effectively supplied and utilized with no discrepancy.

NEXT STEPS: We’re involving the community health volunteers to expand access to the community level.

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MOPE0903

ENSURING THE SIX RIGHTS THROUGH INNOVATIVE APPROACH IN ETHIOPIA

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BACKGROUND: Ethiopia is rapidly scaling up ART programs to meet the Universal Access target; from 380 facilities to 1,355, from 240,000 patients to 397,539, by end of 2010. Reliable and timely data for accessibility of the Right life-saving products at the Right Quantity, in the Right Conditions, at the Right Time, to the Right patients, at the Right Cost is critical to achieving universal access goals. Limited data of poor quality, availability and lack of interconnection between information tracking systems hindered efforts.

To address these challenges and ensure The Six Rights, an innovative technology (http://ethcts.org.et) for capturing commodity and patient information is designed and implemented.

METHODS: After an assessment to define system parameters, functionalities, constraints and capabilities; feedback from key partners, users, Ministry of Health, and Telecommunications Corporation, have been received. Based on these inputs, the system was designed using personal digital assistant (PDA) and offline desktop applications that can be synchronized to a secure web-based central data repository for data transfer, analysis and generation of reports. The system was tested, feedback were received. System users were trained and equipment for implementation was procured. The System is now being implemented nationwide.

RESULTS: Receiving and processing reports lead time is reduced from 1 month to 3-5 days. Reporting rate increase from 70% to 99.82%. Unintentional errors avoided through validation; security is enhanced by authorized password, information is now accessible 24 hours a day, 7 days a week. Informed decisions are being done to bring enough products and avoid stock outs. Experience thus far has shown that the system is user-friendly tool that enhances efficiency and enabling faster decision with lower infrastructure costs helping to ensure sustainability.

CONCLUSIONS: Through simple innovative technology program scale-up is supported and the Six Rights are achieved. System like this is recommended to be leveraged beyond Ethiopia/AVADs programs.

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MOPE0904

MARKET SHIFT TOWARDS HEAT-STABLE LOPINAVIR/RITONAVIR DEMONSTRATES THE NEED FOR IMPROVED FORMULATIONS FOR SECOND LINE TREATMENT OF HIV/AIDS IN LOW- AND MIDDLE-INCOME COUNTRIES

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BACKGROUND: Scale-up of second-line antiretroviral therapy (ART) in low- and middle-income countries is slow. Second-line regimens include a protease inhibitor (PI) plus ritonavir which requires refrigeration (nef stavir excluded). The first heat-stable fixed-dose combination (FDC) PI, lopinavir/ritonavir (LPV/r)), was released in 2006. Analyses of product uptake and PI market trends have not been conducted follow release of the new acceptability formulation.

METHODS: We analyzed market trends for adult PIs using transactional data containing 2,126 donor-funded purchases of PIs from 2003-2009 as reported to World Health Organization Global Price Reporting Mechanism and Global Fund Price Quality Report.

RESULTS: From 2003-2005, indinavir and nef stavir dominated the PI market, accounting for 78-83% of market share, while LPV/r accounted for 11-14%. Following 2006 release of heat-stable LPV/r, uptake increased dramatically with LPV/r accounting for 47%, 76%, 90%, and 99% of PI market share in 2006, 2007, 2008, and 2009, respectively. Abbott represented 90%, 81%, and 74% of LPV/r market share, respectively while Matrix accounted for 10%, 18%, and 25% in 2007, 2008, and 2009, respectively. From 2003-2006, generic LPV/r was substantially more expensive than branded LPV/r; but by 2009 the generic price of $476/person/year was less than the $500/person/year differential price offered by the innovator. After 7 years of flat pricing, Abbott then decreased their differential price to $440/person/year.

CONCLUSIONS: Market dynamics for PIs changed dramatically after the release of heat-stable LPV/r as countries quickly converted to use of the more acceptable formulation. Heat-stable FDC versions of atazanavir and ritonavir, still in development phase, would offer additional advantages over LPV/r including lower pill burdens and competition in the PI market. Generic LPV/r competition remains weak, likely due to intellectual property barriers and low demand. More work is needed to promote generic production and competition of more affordable and appropriate PI formulations for low- and middle-income countries.

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Supporting HIV care: innovations in testing and laboratory support with limited resources

MOPE0905-MOPE0906

MOPE0905

The role of point-of-care CD4 diagnostics in reducing the burden of HIV/AIDS in developing countries

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Issues: As developing countries incorporate CD4 testing into their national treatment guidelines, they must create systems in which CD4 testing is accessible in resource-poor areas. To tackle this problem a number of rapid point-of-care (POC) CD4 testing devices are being developed. The first of these technologies is expected to be available within the next year. However, little is known about the best ways to implement POC CD4 testing and what its potential impact on the overall health system or disease progression would be.

Description: Quasi-structured interviews of health care providers and HIV/AIDS policy makers in Ghana and Zambia were carried out over a period of five months. These interviews identified the key uptake drivers for POC CD4 tests. In addition, by incorporating the results of a household survey conducted in Ghana and Zambia into a straightforward dynamic model of HIV progression, we estimate the number of people who would gain access to antiretroviral therapy when POC CD4 tests become available. Combined, these data reveal the incremental costs and benefits of rolling out POC CD4 in select cohorts/tiers of the health system.

Lessons learned: POC CD4 tests may have the greatest impact if utilized in specific settings in which access to flow-cytometry has not been adequate. In particular, POC CD4 testing may be most useful if used in PMTCT centers and rural areas. POC CD4 testing may also be utilized to relieve the burden on healthcare workers that are near or at capacity.

Next steps: These findings will help inform national AIDS programs as they consider revising their treatment and testing strategies when POC CD4 tests become available.

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MOPE0906

Dried blood spots (DBS) and dried plasma spots (DPS) collected on filter papers are suitable for the quantification of HIV-1 viral load (VL) in patients receiving antiretroviral therapy (ART) in resource constrained settings

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Background: VL measurement is useful in monitoring the development of drug resistance in patients receiving ART. Evidence shows that DBS can produce comparable results, particularly when VL is low. We evaluated DBS performance collected on newly designed Whatman FTA cards along with DPS and DBS collected on Whatman 993 cards for VL determination.

Methods: Whole blood left over whole blood from 79 ART patients was used to prepare DBS and DPS using FTA and FTA key uptake tests and plasma samples for VS DBS/2 plasma vs. DBS/4 weeks

Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>DBS vs. DPS</th>
<th>FTA vs. FTA</th>
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</table>

[Bland Altman R-squared, Correlation and P-values]

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Developing/implementing chronic disease programmes in resource-limited settings

MOPE0907-MOPE0909

MOPE0907

Human and financial resource requirements for decentralization of HIV treatment and care in Kenya

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Issues: During emergency response HIV services expanded in Kenya through secondary facilities. Concentration in hospitals resulted in longer wait and travel times, and negatively impacted ART adherence. In moving to sustain-able chronic care, Kenya aims for equity and access to quality HIV services through decentralization.

Description: Kenya’s decentralization plan calls for decongesting hospital-based HIV service delivery by extending ART provision to ‘satellite’ primary facilities. A higher-level central facility would support 5–14 satellites. Central sites initiate ART through doctor visits and lab work, and can perform six-monthly VL counts. Satellites sites would absorb some of the care load. At the end of 2008, 80% of services were provided in hospitals nation-wide. From this point, our analysis estimates the costs of three scenarios of decentralization.

Under a ‘moderate’ decentralization scenario, hospitals provide 60% of care in 2010. Each province started from its December 2008 level of decon-centration. The moderate scenario best fits a 50% annual increase in ART (as per predicted monthly enrollment) and 31% increase in VL sampling. The number of required satellite sites would be 864 (compared to about 300 originally). About 50 new central sites would be needed at a 1:4-1 ratio. Such decentralization shifts management of approximately 125,000 care and 150,000 ART recipients to satellite facilities. The estimated cost is 776,000,000 Ksh (US$9.8 million) for new equipment and training of staff at these sites. Few additional doctors would be needed. However, moderate expansion of satellite services requires 490 new nursing and 110 new laboratory staff.

Lessons learned: Kenya has at least 2,750 government primary health facili-ties, of which only 30% need be satellites under moderate decentralization. The average unit cost of decentralization per satellite site will be US$6,700.

Next steps: Extension of a hub-and-spoke decentralization model seems feasible in Kenya. Government and partners need to prepare for the costs involved.

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MOPE0908

Scaling up antiretroviral therapy in low resource settings: a case study of a successful decentralized approach in Chitungwiza city, Zimbabwe

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Issues: The emergence of the HIV pandemic has led to a significant increase in the demand for HIV and AIDS services in the context of diminishing health financing. With the need for rapid scale up of ART services, the demand for these services has overstretched health systems. There is an urgent need for decentralization of ART services to ensure greater access to communities.

Description: Chitungwiza central hospital is an ART initiating site in Zimba- bwe managing over 6,000 patients on ART. To overcome some of their chal-lenges, the Ministry of Health, with support from Elizabeth Glaser Pediatric AIDS Foundation and other stakeholders, held a number of meetings with representatives within Chitungwiza city to spearhead the decentralization of ART services. Their efforts resulted in formulation of a technical working group, formal assessments of local authority clinics for their readiness to offer HIV services and trainings on adult and pediatric HIV management, which were followed by a two-week clinical attachment at a center of excellence... The working group developed SOPs and referral tools which are currently being used. Targeted healthcare workers (HCWs) were trained in drug and logistics management and monitoring and evaluation

Lessons learned: Sensitization meetings were critical in ensuring local buy-in and ownership of the decentralization program. Clinical attachments at well-established ART sites increased health worker confidence to manage patients on ART... In the planning phase, there was minimal community participation, however, in the implementation phase, community nurses were later involved in sensitizing communities resulting in significant uptake in the program. Successful decentralization re-quires political commitment from the Ministry of Health, resource mobilization from partners, well defined management and M&E systems, strong technical support and community involvement.

Next steps: Quarterly decentralization meetings to share experiences, suc-cesses, lessons learnt and challenges will take place. Regular supportive supervi-sory visits and mentoring of health workers are instrumental to successful decentralization.

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MOPE0909

ART outreaches to improve access to HIV/TB care services

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MOPE0910

A data-driven approach towards programme quality improvement in a PMTCT programme in Zimbabwe

G. Mujarani, M. Manuyi, B. Engelsmann, J. Keatinge, A. Mahonva, D. Patel

MOPE0911

Improving data management through strengthening the Health Management System (HMIS) in post conflict Northern Uganda

D. Sera, M. Omonyo, L. Ciccio

MOPE0912

Lessons learned from the introduction of decentralized monitoring systems for HIV program in Tanzania

S. Teleka, G. Sori, Z. Musmi, M. Toda

Working with what you have: improving local data systems to support HIV/TB programmes

MOPE0910-MOPE0913
MOPE0913
Use of the perinatal and neonatal clinical history form in the Dominican Republic and its implications for improving testing and treatment of HIV and syphilis during pregnancy

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Background: As a component of the Latin American and Caribbean Initiative for the Integration of Prenatal Care with the Testing and Treatment of HIV and Syphilis (ILAP), we conducted the Perinatal and Neonatal Clinical History Form Project (PANC) in the Dominican Republic (DR). In countries where the Perinatal and Clinical History Form (HCP) is used, the frequency of completion of the form and the reliability of data reporting are unknown. The objectives of the PANC Project were to investigate the current use of the HCP, identify weaknesses of the HCP as a tool for the collection of data about HIV and syphilis, and obtain suggestions for the improvement of data collection and reporting.

Methods: Seventeen semi-structured interviews were conducted in 2009, in addition to direct observation of the process of taking clinical histories and the completion of the HCP. Data were coded to identify common themes and to create flowcharts. Information was supplemented by review of government and research documents.

Results: In the DR, maternal-infant healthcare providers are familiar with the HCP and use it on a daily basis, but its utility as a tool for improving clinical follow-up and epidemiological analysis is not emphasized. The HCP is filled out incompletely and no system exists for manual or electronic compilation of data from the HCP. All interviewees agreed upon the importance of including variables related to the clinical management of HIV and/or syphilis.

Conclusions: The results of this study demonstrate that there exists a need to establish a mechanism for the monitoring and evaluation of HCP use, spanning from when it is filled out during a prenatal visit to the extraction and analysis of epidemiological data, with the ultimate objective of improving prenatal and neonatal clinical care for HIV, syphilis, and other perinatal conditions.

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MOPE0914
Use of an electronic medical record system to identify HIV-infected patients within a large community-based, primary care health network

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Background: Many HIV-infected patients are diagnosed and managed at community-based clinics. Identification/follow-up of these patients for quality improvement, research, and/or outreach purposes is difficult (for reasons including limited information systems, etc.). We describe an HIV “case-finding” tool used within an integrated system of electronic records within a large medical center.


Results: Patients were potential cases if they had ≥ 1 outpatient visit with an “AIDS” (I042) or “asymptomatic HIV infection” (V08) ICD9 code, and ≥ 1 of the following: 1) positive Western Blot after any HIV-1/2 antibody test, 2) CD4 and concurrent detectable HIV viral load (VL), 3) CD4 and concurrent undetectable VL, 4) detectable VL, 5) undetectable VL, 6) CD4≤25, 7) no laboratory result. Table 1 lists the positive predictive value (# confirmed infections/# potential cases x 100%) for each criterion.

<table>
<thead>
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<th>Lab result</th>
<th>N</th>
<th>PCC</th>
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</tr>
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<tr>
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<td>100%</td>
<td>93%</td>
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<td>CD4 and detectable VL</td>
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<tr>
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<td>21</td>
<td>48%</td>
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</table>

Table 1. HIV case-finding results

Conclusions: Laboratory and billing data can be used to identify HIV-positive patients receiving medical services in community-based health centers. Quick information retrieval is possible if data are available through integrated electronic health information systems.

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MOPE0915
Efficacy of a novel spreadsheet program for pharmacy-based antiretroviral (ARV) monitoring in Southern Africa

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Issues: Government-led efforts have expanded HIV medication access to rural populations in southern Africa. However, limited medication choices subject patients to high side effect profiles, and require more efficient drug monitoring. Most clinics have underdeveloped monitoring programs, as limited pharmacy resources have funneled efforts toward more urgent functions like dispensing and stock management. A unique pharmacy practice residency was created by Rutgers University and a global pharmaceutical company’s philanthropic foundation to study and assist in the delivery of enhanced pharmacy services to HIV patients. This abstract describes an innovative spreadsheet program, created by the resident, and utilized by pharmacy staff to facilitate ARV monitoring.

Description: The PharmD resident developed a structured tool, featuring a user-friendly spreadsheet. The spreadsheet was incorporated into the pharmacy staff’s daily routine to address irregular drug monitoring records. Data was entered into the tool for each visiting patient (e.g. prescribed ARV medication(s) and dose, pill count from last fill, drop-down list of common adverse events, and last CD4 count and viral load in medical record). An internal adherence calculator and medication/population tracking option were additional capabilities that enhanced patient safety. To support optimal usage, an on-site modular learning program was developed and implemented, with an accompanying operations manual.

Lessons learned: The ARV monitoring tool enabled pharmacy staff to easily and routinely obtain key information to make a complete assessment of a patient’s drug treatment. Moreover, continuous use of the tool stimulated more efficient and individualized counseling. Input from both user and developer was critical to the development of a successful ARV drug monitoring tool, which must be customized to meet the unique needs of different sites.

Next steps: Sustained success of the ARV monitoring spreadsheet program will require a continuous improvement program based on user feedback and persistence in providing appropriate staff training.

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Innovative low cost solutions to data tracking for HIV programmes MOPE0914-MOPE0916

MOPE0916
Tracing patients defaulting on ARV treatment at resource limited public health facilities in KwaZulu Natal

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Background: Defaulting on ARVs leads to: poor patient management and survival, wastage of resources and increase resistance to the treatment drugs. Implementing an electronic patient database to monitor defaulter patients was used to support the existing information base and decision support systems.

Methods: An electronic system based on Internet-based and Access database was developed for monitoring patients defaulting on treatment. The database was installed at six public health facilities within the eThekwini district, KwaZulu-Natal. Patients who missed their pre-scheduled clinic visit within 5 days were regarded as defaulters and patients who did not return to the clinic within 90 days were categorized as lost to follow up. Patient contact details, reasons for defaulting and whether adherence counseling took place telephonically, was captured and maintained by data quality officers during a 12 month period. Up to three telephonic attempts were conducted if the patient failed to return to the clinic for treatment.

Results: 1863 patients were identified as defaulting on their monthly clinic visit of which 391(21%) were lost to follow up. 72 % of patients were successfully traced, with 61% of patients returning to the clinic after a single telephonic contact. Patients returning to the clinic after being followed up within 5 days is significant as opposed to those who were contacted after 5 days(p<0.001). One third of the patients who defaulted and subsequently became lost to follow up were male.

Conclusions: Continuous follow up of patients does impact on patients returning for their clinic visits and receiving treatment. Of the greatest impact is following up on patients within 5 days of their default clinic visit date. The defaulter database was a useful tool to assist health care providers in managing patients who have defaulted on their clinic visit.

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MOPE0917

The introduction and impact of contraindicated ARV drug combination interventions to the New York State AIDS Drug Assistance Program (NYSADAP): the interaction of clinical pharmacology and HIV treatment guidelines

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Background: In the United States ≥90% of HIV patients receive ARV medications paid for by public financing. Effective HIV therapy involves use of multiple medications in combination which may lead to misuse. Clinical standards of care and drug safety information were applied to claims data generated through NYSADAP to determine utilization and prevent harm resulting from inappropriate prescribing, illustrating that public health administrative databases can be used to address patient safety.

Methods: Potential drug interactions were identified in the ADAP records for any FDA approved ARV agent dispensed October 2006 to December 2009. 16 absolute and 3 relative combinations derived from the University of Liverpool bases can be used to address patient safety.

Results: 115,139 ARV medication regimens involving 908,420 ARVs for 25,463 unique ADAP recipients were individually analyzed quarterly for 3.25 years. Over 88.7% recipients per quarter were consistent with US and NYSDOH guidelines. Targeted messages to prescribers of ARV drug interaction safety warnings were tailored harmful prescription practices by 87.3% with 100% of all subsequent contraindicated regimens blocked at pharmacy.

Conclusions: The vast majority of ARV regimens prescribed via NYSDOH are appropriate and consistent with both guidelines and drug safety information. Targeted messages about safety and appropriate regimen alone do not eliminate unsafe prescribing. A combination of hard edits with clinical education is effective. Pharmacy claims data can identify and curtail unsafe ARV drug interactions.

MOPE0919

Results from online reporting system on National Antiretroviral Treatment Program, Thailand 2009

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Background: National Health Security Office (NHSCO) has taken the responsibility on providing HIV/AIDS treatment and care according to benefit packages of universal coverage insurance in Thailand. Since April 2007 - Sept 2009, 186,124 PLHIV registered in online systems; National AIDS Program(NAP). 141,820 cases received ARVs.116,382 cases are currently taking ARVs. Data were reported by 953 hospitals.

Methods: Data were analyzed by descriptive methods from 4 modules in NAP: VCT, ARVs, Laboratory, opportunistic infection.

Results: As of September 2009, 341,073 cases have been enrolled to VCT, 45.5% are male. Most of them are 21-30 years old (30.0%), 259,846 cases(76%) voluntary accepted HIV testing. The results show 17,168 cases(6.0%) are HIV+ and 9,974 cases(3.3%) are male. From currently taking ARVs cases, 111,196 cases(95.6%) and 5,186 cases(4.4%) received first and second-line regimens respectively. Number of second-line cases increases rapidly (N=2074,40.8%) compare with 2008 while in 2009 number of new ARVs registered is stable which around 2000 cases/month.In 2008 and 2009 patients who still take ARVs after 12 months increasing as 67,569 cases(86.2%) and 97,333 cases(87.9%) and patients who died within 12 months after initiating ARVs as 6,436 cases(1.3%) and 1,274 cases(0.93%) accordingly. From laboratory results 11,132 cases(69.1%) who are eligible received CD4 testing at least 2 times/year, 83,645 cases(71.2%) received drug resistance testing resistance testing.In addition, according to the NAP, patients receiving ARVs have opportunistic infections: Tuberculosis, PCP and Tuberculosis: Extrapolmonary 1.17%, 0.34%, and 0.30% respectively.

Conclusions: Not only for financial or reimbursing purposes, NHSCO can also use the result from NAP to show coverage of benefit package, performances and health outcomes. Moreover, using results for targeting the weak point of ART system in regional, provincial and district level is very essential for local units.

MOPE0920

Use of mobile phones for improving patient adherence to ART: lessons from Kenya

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Issues: Despite numerous setbacks in Sub-Saharan Africa, the region has registered the world’s greatest rate of uptake in mobile telephony. In Kenya, approximately 43% of the population are mobile phone users.

Description: A recently completed randomized controlled trial, the Universities of Manitoba and Nairobi HAART Cell Phone Study (also known as “Wofel”), tested a weekly supportive text messaging intervention, which demonstrated promising results for improving patient adherence to ART in HAART programs, and HAART patient quality of life. Because 273 patients were randomized to the intervention, the study team identified the need to develop an application to automate the tasks of sending weekly text messages to patients, and receiving and sorting patient responses in order to lessen health care worker work load. Three applications were developed: an internet-based platform, a server-based application using the open-source software Rapid SMS, and an open-source smart phone-based application.

Lessons learned: Each approach had its strengths and drawbacks. The internet-based system was abandoned because it was not being used as tool. The server-based solution was economical and simple to use, but messaging was periodically slow due to cell phone network over-subscription, and the server was prone to crashing. The smart phone-based application had neither server nor internet dependency, but handsets were relatively expensive and development stalled due to lack of capacity. In sum through functional referral application could be developed pending additional work, capacity building and financial funding. The applications developed are promising and could be adapted to other areas of e-health, such as PMTCT or malaria treatment. Organizations should pool resources to avoid duplicating efforts.
MOPE0921
Opportunities to reach residence based female sex workers (RBFSW) through cell phones - an experience from Bangladesh

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Background: Though the HIV prevalence rate among Female Sex Workers (FSW) has remained < 1% since 1998 in Bangladesh, the rates of syphilis in urban areas are high, calling for continued prevention efforts. NGOs encounter challenges to reach residence based FSWs because of their hidden nature. To find out the operational dynamics to reach them a study was conducted to unveil innovative outreach approaches as per the dynamics of residence-based sex trade in Bangladesh.

Methods: The study was employed in Dhaka and Sylhet districts. Total 45 in-depth interviews with RBFSW (23 in Dhaka, 22 in Sylhet); 43 key-informant interviews with GO/NGO/staff the power structure of sex trade, law enforcers, and regular clients in Dhaka, (17 in Sylhet) and 14 focus group discussions with RBFSW, peer educators, and service providers conducted. Moreover, a quantitative survey was conducted among 195 RBFSW.

Results: In Dhaka and Sylhet, 23.3 (±4.84) years in Dhaka and 22.80 (±4.08) in Sylhet. RBFSW were permanent (business at fixed site) to mobile (business in different locations). About half in Dhaka and one-third in Sylhet also sold sex in hotels and on streets. Mobility is influenced by client security issues; the “Sardarnis” (owners of the girl) and pimps being the usual decision-makers. One-fifth RBFSW preferred communication through cell phones to counter identity disclosure through outreach services. About 50% RBFSW possess and use cell phones to contact clients. Others borrow it from their power structure. Many peer educators use cell phones to contact RBFSW, Sardarnis and pimps. All acknowledged the potentiality of cell phones in HIV interventions.

Conclusions: Considering its use in networking, the project adopted potential strategies to communicate with RBFSW through cell phones for their participation in interventions. Coordination, monitoring field and solving problems and implementation are other uses.

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MOPE0922
Using phone follow-up system to understand barriers to ART initiation at Good Shepherd Hospital in Swaziland

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2, 3Good Shepherd Hospital, Sibiti, Swaziland, 2, 3Good Shepherd Hospital, Sibiti, Swaziland

Issues: 47,700 patients were on antiretroviral treatment (ART) in Swaziland at the end of 2009. Until recently, there were no structured pre-ART services in the country. The Ministry of Health and International Center for AIDS Care and Treatment Programs (ICU-ICAP), ICAP-Swaziland, Mbabane, Swaziland, 2Good Shepherd Hospital, Sibiti, Swaziland, 3Ministry of Health, Swaziland National AIDS Program, Mbabane, Swaziland

Issues: 47,700 patients were on antiretroviral treatment (ART) in Swaziland at the end of 2009. Until recently, there were no structured pre-ART services in the country. The Ministry of Health and International Center for AIDS Care and Treatment Programs (ICU-ICAP), with funding from the United States Govt, established structured pre-ART services at Good Shepherd Hospital in March 2009. The service emphasised patient registration and active follow-up using cell-phone calls.

Description: From July to September 2009, 637 new patients registered for care: 363 (57%) were eligible for HAART and of those, 211 (58%) initiated HAART on their assigned initiation date. Those who missed their appointments were followed-up with phone calls by HIV Care and Treatment staff. Sixty-seven patients (44%) were successfully contacted by telephone. The rest either had no phones or number was unavailable. Of those contacted, 45 (67%) never returned to the hospital. The most frequently cited reasons were inability to afford transport costs, (9%), difficulty getting away from work (6%), non-disclosure to partners (3), and being admitted to hospital (3). Five patients had self transferred to another clinic and 7 had died. Nine patients did come on their appointment date but were not initiated due to laboratory systems failure, their late arrival at the clinic, and delays because of TB treatment. Those that had already started on HAART at the time of phone contact, and seven were booked for a later date but not documented.

Lessons learned: Structured pre-ART services with cell phone follow-up helped identify patients who missed appointment and to contact them. Many either started HAART late due to facility and patient-related issues, compromising care outcomes. Next steps: To improve ART uptake: decentralise ART initiation to primary care clinics to improve access, address work-related barriers and costly faciltiy based systems to avoid delays and continue to monitor and follow up ART eligible patients.

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MOPE0923
Call centre tracing outcomes for HIV and ART patients who missed their appointment and were lost to follow up at twenty public sector ART clinics, South Africa

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FPD, Treatment Cluster, Pretoria, South Africa

Background: Foundation for Professional Development (FPD), a South African Private Institution of Higher Education, is a PEPFAR-Implementing partner supporting 63 public sector ART clinics across 5 provinces. Currently, over 80,000 patients are active on ART and monthly ART initiations average 2,400. Data indicate high rates of missed appointments (MA) contributing to 11% of total initiations lost to follow up (LTFU). Most clinics have limited resources (financial or human) to trace missed appointments/LTFU.

Methods: November 2009, FPD conducted an intervention using a confidential call centre to trace MA/LTFU patients. Using the electronic patient management system (SOGO), FPD identified 13,319 HIV and ART patients classified as MA or LTFU at twenty ART sites. Tracing outcome, patient treatment status, theme for missed appointment and new expected visit date (if applicable) were recorded.

Results: 1979 (25%) calls were answered; 53 (0.4%) hung up or refused information; the remaining patients had either no/incorrect contact details or the call was not answered (85%). 1831 (93%) patient statuses were updated: 355 died, 140 stopped ART, 371 transferred out, 722 were active (lag-time of call), and 243 rescheduled; 148 remained unresolved (predominately because trace was stopped due to confidentiality concerns). Top themes stopped ART included: traditional healing (25), non-compliance (20), and more timely reschedule of patients. Contact details must be confirmed and updated routinely.

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MOPE0924
Impilo! Health in my hands: a health enabling mobile phone pilot

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Issues: While all have a right to health, in South Africa poverty, unemployment, distance from services and related challenges create difficulties in accessing timely and adequate health care services. This project aims to increase access to health services through developing mobile phone technologies that increase community access to health enabling information, and enhance communication and collaboration between service providers and clients.

Description: This project packages and delivers health enabling information at minimal cost, via a USSD mobile phone interface, 24/7. The pilot site, Umkhanyakude District Municipality, KwaZulu-Natal, is rural with poverty and unemployment. The community does not always proactively seek out care and support services, and providers seldom collaborate to utilise scarce resources. The project aims to activate three mechanisms of community collaboration for health with the assistance of mobile technology. First, the Impilo! Directory uses location-based mobile technology to direct the public to HIV health/welfare services. Clients call *120*Impilo then select a service from a menu. Information on local providers is related within seconds. The service is confidential, user-friendly and costs about $0.04 to complete a request. Consequently, this service puts access to health information within reach of everyone. Related services include health and safety reminders and a customer-provider rating service.

Lessons learned: Demand and uptake has been good from all sectors. Feedback strongly supported simplicity in menu choices. By using location-based services, pinpointing client location for appropriate service referral is now possible without onerous menu navigation.

Next steps: With over 85% of South Africans having access to a mobile phone, the project is poised to put health related support in the hands of everyone. With the technical development and testing complete, the next phase involves honing the referral range, community mobilisation and familiarisation with the mobile technology for use throughout South Africa.

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Innovative approaches to sharing/disseminating programme data at the national, regional, district, site and community levels

MOPE0928

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MOPE0925
Solution exchange-innovative electronic service for sharing experiences among practitioners on reproductive health and HIV for young people in Thailand

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Issues: Professionals and community practitioners working on HIV and AIDS need to share information and experiences to enhance strengths and eliminate weaknesses. The Solution Exchange for community practitioners working on HIV and AIDS in Thailand has been established since 2007 in response to this need.

Description: Solution Exchange (SE) provides services to 925 currently active members; the membership consists of government (health, education, and local authorities) 34%, UN 24%, academic 22% and NGOs 20%. The e-platform supports strategic information management; strengthens civil society networking and partnership; provides solutions for members to refine their programmes; and documents best practices on HIV and AIDS related to young people (YP). SE members interact via a mail group that is facilitated by a moderator. More details are at http://www.solutionexchange-thailand.org. Up to January 2010, 12 queries have been accommodated of which two (17%) have been used by national authorities for policy development on Reproductive Health and Young People. Four (33%) have been used by local practitioners to improve interventions and six (50%) have been used by experts and practitioners to enhance knowledge sharing and improve programmes design on HIV and YP.

Lessons learned: SE is practical and cost effective. As computer literacy and internet accessibility are still limited, there is need to overcome these factors. Collecting technical background of members could assist the forum moderator to invite members who have special expertise to guide or lead specific issue. There is a need to formulate the vision and mission of SE.

Next steps: Introduce SE to broader groups of policy makers and programme managers to expand service availability and motivate selected members to lead discussions in specific issues and carry on towards broader utilization of SE to guide policy and programme.

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MOPE0926
LatinSida (LatinAIDS): the first Latin America database about HIV/AIDS prevention, epidemiology, treatment and care, and social issues

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Issues: Over the past ten years, it is estimated that from 2500-3500 have been published articles on HIV / AIDS in Latin America in peer-review journals (scientific literature), compared with 10,000-12,000 papers presented at national, regional or international conferences (gray literature). Because of this, the literature search on research and interventions on HIV / AIDS in Latin America is very complex because the gray literature is not recorded in the databases or grey literature journals, which causes it not be used or lost more part of the experience on HIV / AIDS. The project goal was to create a database of HIV/AIDS research and interventions in Latin America (LatinSida).

Description: We used the following sources: International AIDS Conferences, organized by the International AIDS Society (IAS), from 2000 (Durban) to 2008 (Mexico City); The Latin American Forum on HIV / AIDS organized by the Horizontal Technical Cooperation Group (GTHC), from 1998 (Mexico City) to 2009 (Lima, Peru); the Central American Congress on STI / HIV / AIDS (CONCASIDA), 1999 (San Pedro Sula) to 2007 (Managua); and databases of indexed journals (MEDLINE, EMBASE, PsycINFO and Sociological Abstracts). Using Reference Manager-11 (R), created a database with full references, abstracts and full text of the work on HIV / AIDS in Latin America. Currently, 10,000 references are available at: http://www.latinaida.org.mx and the database is updated continuously.

Lessons learned: The traditional databases of scientific information not record the full range of investigations and interventions in Latin American countries. LatinSida is the first Latin American HIV/AIDS database successfully integrated experience in the region.

Next steps: There is an urgent need to improve information dissemination on HIV/AIDS in Latin America. The needs to meet the need to disseminate knowledge to health workers, activists, health workers, people living with HIV, universities and public in general.

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MOPE0927
Setting targets, saving lives: a facility based HAART initiation calculator

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Background: Global delivery of HAART falls well short of the need. In South Africa, the government has set a goal of providing HIV care for 80% of all those who need it. However, few simple, practical tools are widely available to calculate an individual facility’s actual contribution to the district, regional and national HAART initiation targets and for each step of the HIV care pathway that precedes HAART initiation.

Methods: We previously reported a tool that could be used by South Africa health districts and subdistricts to calculate estimated monthly need for HAART initiation using statistics from the Actuarial Society of South Africa (ASSA). We adapted and extended this tool to allow individual facilities to calculate targets for the testing, referral and initiation steps in leading to HAART initiation, using an algorithm that includes local HIV prevalence, and known proportion of clients with CD4< 200cells/dl.

Results: The tool can be accessed via the internet (www.ih.org) and provides, for each facility participating in HIV care in any defined region, the target number of HIV tests, CD4 count tests, and estimated HAART referrals to contribute fully to the region’s monthly HAART initiation target. To prototype testing of the tool where facility-specific process targets were used as part of a rapid cycle quality improvement intervention, HIV testing rates increased by >100% (from 1,500/mo to over 3,000/mo) over a 6 month period in a rural South African health subdistrict with 220,000 population and 45 facilities.

Conclusion: This widely accessible tool can be used to plan targets and track performance for district and facility staff and managers trying to improve performance of their HIV care delivery systems. When used in combination with quality improvement methods, this tool can be a valuable part of our quest for universal coverage for patients needing HAART.

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MOPE0928
Monitoring 32,468 patients receiving free antiretroviral treatment in Mexico with the information system “SALVAR”

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Background: Since 2003, there are universal access to antiretroviral treatment against HIV/AIDS in Mexico. The Ministry of Health acquires and provides free drugs to people without social security. In 2007 it was created the System of Administration, Logistics and Security ARV (SALVAR), which is a computer system operated via the Internet throughout the country, for the registration and monitoring of all patients in treatment (http://www. salvar.salud.gob.mx).

Methods: The SALVAR system was programmed in PHP and stored in a SQL database Postgres. Using the security certificate 128-bit SSL ensures confidentiality and security of patient information. Those responsible for operating the system were trained in a National Workshop in Mexico City and a new version came into operation in May 2006.

Results: Until 31 December 2009, it has a record total of 32,468 patients receiving ARV in 134 medical units of the Ministry of Health. The 70.5% of patients are treated in hospitals and 29.5% in ambulatory care centers called CAPASITS. Of the total of registered patients found that 75.1% are male and 24.9% are women. Four of five patients have already registered recent values of CD4 testing and viral load, and of these 62.6% recorded as undetectable viral load. The average annual drug cost per patient was $3870 USD.

Conclusions: The SALVAR has built the first national database of patients with ARV in Mexico and is implemented in all medical units of the Ministry of Health. The SALVAR allows monitoring of patient outcomes, controlling inventory and purchasing schedule appropriately to ensure a timely supply of medicines.

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MOPE0931
The birth of the "HIV Infection Control and Patient Rights Protection Act" in Taiwan
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Background: In 2007, the HIV Infection Control and Patient Rights Protection Act in Taiwan was amended from previously known the "AIDS Prevention and Control Act". The change of the title was the most noticeable characteristic of this amendment. This amendment was welcomed by Taiwanese HIV/AIDS NGOs. However, the punishment for PHLV and inconvenient prejudicial measures remained. How could this amended Act, that was established to protect the rights of PHLV, still punish and criminalise them? This is the main research question in this presentation.

Methods: Genealogy was employed. The major materials used were legislators' interpretation documents, governmental responses to the interpretation documents, and opinion articles in the three most popular national newspapers in Taiwan from 1987 to 2007. Results: From the change of the title and the amendment of related articles, it is clear that the Taiwanese government's early responses to HIV/AIDS reflected prejudices and homophobia. Its response transformed as more informed public discourse emerged in the wider public domain. In many respects, however, the same prejudices linger and legacy of prejudice and homophobia continue to remain as a legislative discourse. This eventually formed the amended Act to punish and criminalise PHLV, although it was expected to protect their rights.

Conclusion: The establishment of the Act was officially announced to stop the spread of HIV/AIDS. The measures suggested, supported, or employed, however, in the Act, which was deeply influenced by prejudices and homophobia, unproductively became techniques used to discipline people. However, it is suggested that this legacy could be countered through a more robust public health education campaign that seeks to develop well informed public vision of HIV/AIDS.

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MOPE0932
Monitoring and evaluating activities of the Austrian Community and the federal government dealing with HIV/AIDS. In the area of New Public Health Austria serves as a role model for cooperation between politics and non-governmental organizations
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Background: The “Österreichische Aids Hilfe” was founded in 1985. Throughout the past 25 years it faced structural changes, financial problems and socio-political issues. As a result there are now seven autonomous non-governmental organizations working on a federal level. Although each organization mainly focuses on the respective province, they regularly join forces for projects and campaigns on a national level.

The objective of this paper is to document the efforts, projects and campaigns of the Community in cooperation with the Austrian government from 1983 to 2010.

Methods: In-depth literary research of documents and studies provided by the Austrian parliament, the ministry of health and the “Aids Hilfe Österreich” was applied to collect relevant data. Additionally expert interviews were carried out.

Results: The process of normalization of HIV/AIDS brought about new problems for the work of “Aids Hilfe Österreich”. The issue “HIV/AIDS in Austria” has almost vanished from the political agenda. The data retrieved shows less political activity during the last three legislation periods, e.g. no nationwide campaigning initiated by the government.

There is still no national HIV/AIDS strategy paper in Austria and no documentation of policy-results exists until today.

Conclusion: Compared to other countries (e.g. Ukraine) the cooperation between government and community in Austria was and still is fairly good. Generally financial support is provided. Also in countries like Austria it is important to point out that HIV/AIDS is not a ordinary disease. Policies must react to the process of normalization, more emphasis has to be put on prevention, “New Public Health” strategies, and involvement of the community.
Policy determinants and constraints MOPE0933-MOPE0935

MOPE0933
Am I a disabled person? Medicalization, HIV prevention and rights of Japanese people living with HIV/AIDS

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Issues: As an urgent measure to grapple with infections due to tainted blood, dysfunctions in the immune system concerning HIV/AIDS is deemed a sort of physical disability since 1997. As it is, Japanese People Living With HIV/AIDS (PLWAH) are eligible to apply for a physical disability certificate. This investigation, however, suggests that such a policy has had four major implications: One, a relentless medicalisation of PLWAH, two, a certain cordon sanitaire that facilitates control of the PLWAH civil rights, three, PLWAH toughen social invisibility due to fears of ostracism and discrimination, and four, general HIV/AIDS public obliviosity.

Description: This paper reports a study on disability and HIV/AIDS in Japan. An ethnographic investigation with 25 Japanese PLWAH was conducted, grounded on legal, policy-implementation, epidemiological and medical information. Data was collected via a set of sixty-minute, two-semi-structured interviews, which was analysed based on four concepts: impairment, medical practice, citizenship and HIV/AIDS public awareness.

Lessons learned: The informants clearly acknowledged the benefits of the effort to ensure that the PLWAH are granted the financial aid paid some PLWAH can access. Nevertheless, they underlined how their lives have been affected through a medicalising theme that medicalises the existence of HIV/AIDS, often further restricting their citizenship. Moreover, they suggested that such a political stance has been of little help to fight against HIV/AIDS related discrimination, to strengthen public education and to promote activism. Lastly, given the 2004 medical scandal due to blood products contaminated with the hepatitis C virus, the informants signalled the government’s incapacity to deal with the pharmaceutical industry and infectious diseases as well.

Next steps: Findings of this research should be included in a comparative study with PLWAH from different nationalities and under different health care schemes.

MOPE0934
Causes and effects of the 2008/2009 antiretroviral moratorium in the Free State province of South Africa

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Issues: The Free State province had the lowest antiretroviral coverage in South Africa at 26% in 2008. In November 2008, an antiretroviral treatment moratorium was enacted in the province. The moratorium lasted for four months, during which no new patients were initiated on treatment. This research investigates the causes of the moratorium, and documents some of its effects on patients and health outcomes.

Description: Using information gathered by the Treatment Action Campaign, AIDS Healthcare Foundation and the Treatment Action Group, this paper examines government response to the Free State’s antiretroviral moratorium, its impact on patients on antiretrovirals. The moratorium’s effects were the result of poor budgeting, inadequate planning, and a failure of political accountability.

Lessons learned: The antiretroviral moratorium not only prevented new patients from accessing treatment, but also led to drug shortages for patients already on treatment, including children. The moratorium obstructed access to CD4 count tests or results, further compromised the accuracy of antiretroviral waiting lists, undermined HIV prevention initiatives in the Free State province, and hindered public confidence in the health system.

Next steps: Civil society groups invited the Public Finance Management Act to stop the antiretroviral moratorium. Government was forced to protocol that protocols and warning system be instituted to prevent the scale-back of essential health services in times of financial crisis. The global economic downturn threatened sustained access to antiretrovirals in many countries, but also, a better monitoring of AIDS activist mobilisation (such as that of the Stop-Stockouts Campaign) can protect and enforce the right of treatment access.

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MOPE0935
The role of the political economy in determining HIV and AIDS policies

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Background: Economic evaluations are necessary to make decisions about affordable and appropriate HIV/AIDS policies at the efficient allocation of resources. However, funding constraints are not always the central barrier to the implementation of effective interventions. The political economy can dominate the policy sphere and lead to inefficient implementation of already under-resourced HIV and AIDS prevention, harm-reduction and treatment strategies. We explore the role of the political economy in the facilitation or hindrance of HIV and AIDS policy development at the micro, meso and macro levels.

Methods: A comparative analysis of current HIV and AIDS policies by countries experiencing concentrated, but dissimilar, epidemics was conducted. China, Russia and Thailand. This was through the review of literature and policy documents.

Results: Multiple factors, unrelated to funding, were found to have a determinate role in the non/implementation of what might be regarded as ‘standard’ HIV and AIDS policies. Ideology in Russia has influenced decisions to terminate all support for standard harm-reduction programmes for injection drug users (IDUs), despite available external funding. Russia has, however, responded positively to policies somewhat preventive mother-to-child transmission. In contrast, China and Thailand, recently implemented comprehensive prevention programmes for IDUs, commercial sex workers and men who have sex with men (MSMs). This policy shift has been attributed to: positive responses to local research evidence; inter-sectoral government collaboration; and what has been learnt from recent outbreaks of infectious diseases.

Conclusions: Interactions between governance structures, societal norms and religious-cultural beliefs can shape and even determine HIV and AIDS policy decisions. It is recommended that when HIV and AIDS funding or legislative policy is to be influenced, a political economy lens cognisant of the prevailing social, political and economic context be used.

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Influencing policy development MOPE0935-MOPE0936

MOPE0936
A rights-based approach to combating HIV/AIDS in China

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Issues: While UNAIDS reports that China’s HIV epidemic remains one of low prevalence, and it is customary to associate UNAIDS as ‘high-risk groups’, the virus has been found its way into the general population. In 2003, China initiated an ambitious program to raise awareness of the disease and prevent a generalized HIV epidemic. Nevertheless, its continuing restrictions on free expression and free association has hampered such progress. Human Rights Watch (HRW), for instance, reports numerous examples of harassment and surveillance of AIDS activists and support groups, including the detainment of prominent AIDS and human rights campaigners.

Description: Emphasizing that “human rights” includes the right to be free of diseases, my research proposes a rights-based framework of national guidelines for the treatment and management of HIV/AIDS patients, while fulfilling the urgent need for Chinese people to recognize not merely their civil and political rights, but also their social, economic and cultural rights in fighting the epidemic. One of my forthcoming journal articles chart China’s slow, but increasing engagement with international regimes on human rights issues, from the 1989 Tiananmen Incident, through the Falun Gong Movement, to the 2008 Olympic Games. As such, human rights advocacy strategies will be a very productive method in promoting awareness of and preventing the epidemic.

Lessons learned: What makes sense in a public health context does not automatically become a human rights obligation in international law. Hence, public health advocates should use international human rights law to promote the combat of HIV/AIDS.

Next steps: Chinese government should not leave this urgent issue to local provincial governments. Instead, it should lead and implement an AIDS as part of its human rights agenda and maintain national oversight of it.

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MOPE0937
Using policy development to address HIV and related gender issues in workplaces: low-cost approaches with CSOs in South India

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Issues: Organisations worldwide are wise to respond to HIV. But in countries with low HIV prevalence such as India, they face a lack of support from government and donors and fail to protect their staff from HIV-related discrimination or to provide staff welfare measures. But HIV is not the only issue which organisations ignore; there are also the related issues of gender discrimination and sexual harassment. By addressing these issues and integrating them in workplace policies, organisations can uphold rights and improve their functioning.

Description: STOP AIDS NOW! South India Project supports 50 CSOs, a heterogeneous mix of service providers, including non-HIV specific organisations (42%). We engage them to reflect on by HIV for non-HIV organisations, and to initiate and sustain responses. This mainly involves a low-cost approach of dialogue about HIV and related issues among staff, and policy development.

Lessons learned: At year 3 we interviewed a sample of 327 of the CSOs’ staff. Our findings showed:

- 80% indicated that their attitudes towards PLHIV had improved – an important step towards realizing stigma-free workplaces.
**MOPE0938**

**Setting the stage for negotiating effective PEPFAR partnership frameworks through a participatory, country-led approach to policy reform**

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**Issues:** In order to promote more effective HIV/AIDS programs, PEPFAR identified policy reform and an enabling environment for policy as one of the priorities of the Partnership Framework. The development of the Partnership Framework and Implementation Plan in Cote d’Ivoire presented an opportunity to improve the set of policies that guide its sustainable National HIV/AIDS response. For example, the countryuments, Cote d’Ivoire lacks a pediatric HIV/AIDS treatment policy that has a slow scale-up of pediatric care and treatment improvements, and fragmented OVC services and programs. Cote d’Ivoire also needs a National HIV/AIDS policy to clearly address issues including services for all interventions, HIV prevention, stigma and discrimination, adoption of international standards, gender, and sustainability.

**Description:** In late 2009, the USAID | Health Policy Initiative (HPI) worked with PEPFAR/Cote d’Ivoire and Cote d’Ivoire’s Ministry of Health and Ministry for the Fight Against AIDS to support the development of a Partnership Framework and Implementation Plan. While conducting participatory interviews to assess the barriers and gaps in the policy environment using an adapted AIDS Policy Environment Index with 28 key stakeholder groups including government, civil society, private sector and donors. During a three-day national level workshop with 70 Ivorian stakeholders, the team validated the policy assessment and developed and prioritized an HIV/AIDS policy agenda that is in concert with the National HIV/AIDS Strategy of Cote d’Ivoire.

**Lessons learned:** There is tremendous value in building host-country stakeholder buy-in via full participation and consultation early in the process. Development of an agreed-upon policy agenda is an essential component of the Partnership Framework negotiation process. Consensus building is critical; overall, we observe that focus on HIV has transformed into a wider apprecia-

Next steps: The Cote d’Ivoire experience is a useful framework for other countries preparing Partnership Frameworks and country operational plans. Presenting author email: coleman@futuresgroup.com

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**MOPE0939**

**From Uganda to the UN: how “living advocacy” raises awareness and improves outcomes for PMTCT and pediatric treatment through personal testimonies**

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**Issues:** Every day, over 1,000 children around the world contract HIV -- the vast majority through mother-to-child transmission. Yet only 45 percent of HIV-infected women worldwide receive the medicines they need to prevent mother-to-child transmission (PMTCT) of HIV. Personal stories from women and children with HIV/AIDS have been crucial in raising awareness of the pandemic and strengthening efforts to scale-up critical PMTCT and pediatric treatment services. From Cote d’Ivoire and Uganda to the U.S. and Europe, individual stories, testimonies, and experiences have helped raise awareness of PMTCT and influence national and global policies.

**Description:** This presentation outlines advocacy efforts to improve PMTCT and pediatric treatment through the personal stories of women, children, and families living with HIV/AIDS. The presentation illustrates how “living advocacy,” or small-scale personal advocacy efforts, can transform individual stories into powerful tools to educate global audiences about issues facing women and children living with HIV/AIDS. Specifically, the Foundation used “living advocacy” to elevate HIV/AIDS at the White House, reach millions about the importance of PMTCT through TV, testify before the U.S. Congress, and reach high-level UN officials at global conferences. Through “living advocacy,” individuals reached policymakers well beyond their villages and communities to affect policy change.

**Lessons learned:** This presentation examines how strategic input and co-ordination allowed for women and children living with HIV/AIDS to become champions for better HIV/AIDS prevention, care, and treatment services. This presentation also outlines the challenges that remain in improving access to PMTCT and ARV treatment, including finding innovative ways to spur government commitment to resources to HIV/AIDS given budgetary constraints.

Next steps: These lessons can be duplicated, whatever the democratic operation, the local representa-

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**MOPE0940**

**Parliamentary advocacy: convergence between national and local strategies**

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**Issues:** In July 2009, French health NGOs were involved in a campaign aimed at increasing government funding to the Global Fund (GF). At that time, a French MP of the ruling party, planned to pass a law in which 5% of French contributions to the GF would be kept aside for French operators working in the South. Although French NGOs don’t question the need for French bilateral aid, they consider that decreasing the share of multilateral aid granted by the GF and transferred to French operators would harm an effective global strategy to fight pandemics in the South.

**Description:** At the outset, NGOs repeatedly showed their disagreement to the MP, without managing to make her change her mind. Therefore, NGOs wrote a violent press release to alert press and decision-makers about their position.

The local offices of AIDES continued this advocacy strategy in the MP’s own constituency. Firstly, the militants met the MP; then the press, and the next day an article was published in the local main newspaper about their meeting.

At the same time, the national advocacy strategy grew with new alliances and collaborations: the national platform of NGO’s, CoordinationsFAD, accepted to be the spokesperson for the situations of NGO’s and addressed an official letter to the MP.

**Lessons learned:** On the 10th of November, the MP withdrew her amendment. This action empowered the local militants to work better on international ad-
vocacy issues. NGOs reached their objective and they published a press re-
lease publicly thanking the MP.

**Next steps:** This experience has reinforced the development of a multi-di-

mensional advocacy strategy: the organisations built their demands together without neglecting one-to-one lobbying; they alternate dialogue and criticism; create convergence between national and local advocacy. This kind of action can be duplicated, whatever the democratic operation, the local representa-

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**MOPE0941**

**Quantifying the impact of HIV/AIDS and other chronic illnesses on government Agricultural Extension Service delivery in Zambia: policy implications for HIV/AIDS mitigation at institutional level**

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**Background:** Improved farmers’ production is dependent on an existence of a viable agricultural extension system which is well capacitated with hu-

man capital in terms of trained, skilled and health human resource. The AIDS pandemic has robbed the agriculture sector’s human capital through loss of skilled manpower resulting in erosion of capacity of the sector to effectively transfer technologies. Increased rate of absenteeism and mortality of extension staff pose a threat to improved food security among rural households.

**Methods:** This study assessed how AIDS and other chronic diseases have impacted on: the Agricultural Extension department’s capacity to deliver ex-
tension services, and the department’s human resource budgets.

The study was conducted in Central and Southern provinces whose econo-

mies are dependent on agriculture and have high HIV prevalence above the national rate of 14.3%. The study collected longitudinal data for a six-year period (2002 - 2007) covering in these provinces with staff population of 1500.

**Results:** Findings reveal that about 36% of agricultural camps were not manned due to AIDS related mortality and morbidity. About 5.4 staff (33.2%) are burdened due to staff vacancies attributable to mortality and morbidity.

In terms of employment termination related costs, the Extension depart-

ment incurred ZMK6.3 billion (US$1.0 million) for mortality related costs compared to ZMK6.3 billion (US$1.0 million) for mortality related costs compared to ZMK6.3 billion (US$1.0 million) for mortality related costs compared to ZMK6.3 billion (US$1.0 million) for mortality related costs compared to ZMK6.3 billion (US$1.0 million) for mortality related costs compared to ZMK6.3 billion (US$1.0 million) for mortality related costs.

**Conclusions:** AIDS related chronic mortality and morbidity among extension staff is reducing service delivery in a number of ways; increased number of vacant agricultural camps, reduced farmer access to technologies, and over-

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MOPE0942
The influence of the united forces of several NGOs on laws aiming to protect HIV-positive foreigners

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Issues: In 1993, the French law, restricted access to social security for foreigners. Only those with a regular permit could receive benefits from social security. Even then, foreign residents were excluded from this coverage as well as care, and in 1996 from the first treatments. At that time, France deported HIV-positive foreigners.

Description: In 1994, HIV/Aids organisations together with organisations offering medical and social support to foreigners collaborated to prevent the removal of ill people from care and treatment. Over time, 35 different organisations joined the group. In 1996, campaigns and actions in favour of undocumented migrants around the interest of the public, which was partly due to the interventions of politicians and MPs. In 1997, at the same time as a new law on immigration was passed, the URME (Emergency: ill foreigners in danger) joined the group. In 1998, organisations of foreigners who do not have access to treatment in their country of origin. HIV-positive foreigners then found themselves in the situation where they could not be deported, but still did not have access to residence permits.

Lessons learned: The mobilisation of these organisations, which combined legal expertise and the visibility of the media, highlighted this paradox as well as the lack of AKTs in the southern countries. In 1998, with the help of a new law on immigration, they succeeded in gaining a special residence permit for seriously ill foreigners. The connections forged with politicians during the law on immigration, they succeeded in gaining a special residence permit.

In other countries, organisations involved in these issues would like to create a special health care residence permit.

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MOPE0943
Harm reduction, legislation and intersectorality: the strategy of the Brazilian programme

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Issues: The high level of alcohol consumption, increasing consumption of crack, as of ill people from care and treatment. Over time, 35 different organisations joined the group. In 1996, campaigns and actions in favour of undocumented migrants around the interest of the public, which was partly due to the interventions of politicians and MPs. In 1997, at the same time as a new law on immigration was passed, the URME (Emergency: ill foreigners in danger) joined the group. In 1998, organisations of foreigners who do not have access to treatment in their country of origin. HIV-positive foreigners then found themselves in the situation where they could not be deported, but still did not have access to residence permits.

Description: To define articulated government strategies, the Ministry of Health and the Brazilian Parliament organised a seminar on Drugs, Harm Reduction, Legislation and Intersectorality with the aim of discussing the context of drug use in Brazil, the respective legal framework and a harm reduction policy; and to indicate intersectorally articulated intervention strategies that could foster social inclusion of drug users. The agenda, speakers and participants to be invited to the seminar jointly defined the aims and the costs were shared.

Lessons learned: The political support of parliament under that sustain the health needs of this segment is important to provide solid backing for drug users. The penalties the law applies to such people is out of context and is one of the factors exacerbating their vulnerability and fostering violation of their human rights. Full awareness of the circumstances surrounding cases is crucial to achieving changes and reform in the legislation. The debate among the various actors contributed towards reducing prejudice directed at people that consume alcohol and other drugs and creating an understanding that responsibility for facing up to complex issues like this needs to be shared. A political event that effectively involves the Parliament mobilises the Brazilian media and heightens the visibility of the situation.

Next steps: Publicising the report on the event and discussing its recommendations in face to face meetings in the municipal sphere to assist in the elaboration of local plans; and holding Symposium 11, 2010.

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MOPE0944
Strengthening structures for HIV prevention research: national policy guidelines for research oversight

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Issues: Under the new global framework for HIV prevention research in sub-Saharan Africa has highlighted the need to strengthen national institutions to oversee and administer such research, providing national coordination, securing technical expertise, developing national contexts, and ensuring foreign-sponsored prevention research posing novel dilemmas in nurturing research capacity and addressing health needs of populations, an imperative has arisen to develop national policy frameworks commensurate with these changing realities. Kenya provides a good example of a country attracting increasing research investment given its infrastructure and capacity for research.

Description: In cooperation with the Global Campaign for Micronutrients, Kenya Medical Research Institute with mandate from the National Council for Science and Technology, taking into account relevant stakeholders, conducted a review of current structures for approving and conducting HIV prevention research in Kenya. Through policy landscape analysis, we examined the role of organizations and regulations governing HIV prevention research, including (1) documented research approval process, (2) ethical considerations relevant to the topic of HIV prevention research, and (3) regulatory review in the context of a national research policy and regulatory framework.

Lessons learned: Based upon this analysis, although it is clear that specific government ministries set the broad agenda for HIV/AIDS research, there is lack of clear documentation and clarity regarding the processes of ethical review in Kenya, with some decentralization of research approval processes but not clarity on the respective roles of various stakeholders and their relationships with each other.

Next steps: To secure the benefits of research while protecting the rights of human subjects, it is imperative to develop clear documentation for research oversight. Given conclusions from this review, this project proposes to inform the research approval process and promote safeguards for ethical oversight of clinical trials. This project will inform the development of national guidelines for HIV prevention research in Kenya, support sustainable national health research systems and set a valuable precedent for national policy revisions throughout sub-Saharan Africa.

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MOPE0945
Two sides of the same coin: reducing HIV prevalence among men who have sex with men (MSM) and inject drugs

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Issues: Sex positivity has been instrumental in the success of Australian HIV prevention campaigns aimed at MSM for many years. This positive approach is based on well-established theories such as health promotion and adult learning, however there is often resistance to applying these principles to work that addresses injecting drug use risk practices. This presentation will explore potential challenges and benefits of a HIV prevention strategy that maintains a positive approach to people who inject drugs.

Description: A brief outline of the sex positivity movement, theoretical and policy underpinnings, and some practical applications of the approach will be provided. Attendees will then be invited to explore some of the barriers and incentives to using positive representations in work that addresses health issues associated with injecting drug use. The evidence base for this approach and some examples will be provided.

Lessons learned: Sex positive approaches to HIV prevention among MSM have been highly successful, and have assisted in promoting strength and cohesion within these communities in Australia. Nationwide support from AIDS organisations for such approaches and involvement of affected communities has been instrumental in ensuring consistency in HIV prevention work aimed at MSM. An absence of explicit policy directives around the need for positive representation of injecting drug users in BBV prevention materials has contributed to reluctance by health services to acknowledge the pleasures and realities of injecting drug users’ lived experiences. Ambivalent or negative representations of injecting drug users are considered a ‘safe’ option, however they contribute to the ongoing marginalisation and stigma of injecting drug users.

Next steps: There are opportunities for health and HIV prevention services to embrace positive representation of injecting drug users and community involvement in policy. There is also clear need to advocate for the development of such policies at a higher level.

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MOPE0946
2010 WHO guidelines for isonazid preventive treatment and intensified case finding for TB in people living with HIV in resource constrained settings

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Background: As part of the Three I’s for HIV/TB, the World Health Organization (WHO) recommends screening of all people living with HIV (PLHIV) for tuberculosis (TB), providing treatment when TB is diagnosed or isoniazid preventive therapy (IPT) for latent tuberculosis infection (LTBI). There is no internationally recommended, evidence-based approach to TB screening and IPT implementation in resource-constrained settings has been limited. The WHO convened an expert committee to develop new recommendations for TB screening and IPT in people living with HIV.

Methods: WHO developed recommendations using a systematic approach including GRADE profiling and risk-benefit assessment methodology. Evidence review profiles, cost estimates, and feasibility were considered. Literature review included unpublished meta-analyses, ‘grey’ and published literature on TB and HIV.

Results: Recommendations included: best combination of signs, symptoms and diagnostic procedures as screening tools to determine eligibility for LTBI who have the highest risk of TB. IPT for LTBI in PLHIV is the strategy of choice for people in resource constrained settings; however, TB screening and IPT in PLHIV might not be feasible in all settings.

Lessons learned: The approach is flexible and can be adapted to specific contexts. The recommendations are evidence-based and take into account local TB and HIV prevalence.

Next steps: Further research is needed to refine the recommendations and to assess their feasibility in different settings.

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Poster

265
for treatment of LTBI, the optimal time to start IPT with respect to immune status and ART; whether low adherence to LTBI treatment is an implementation barrier; whether the provision of treatment for LTBI is cost-effective, whether PLHIV who had received TB treatment in the past should be provided secondary prophylaxis to prevent TB re-infection or recurrence; and feasibility of tuberculosis skin test implementation.

**Conclusion:** The WHO guidelines committee recommended an algorithm using current cough, fever, night sweats and weight loss to identify PLHIV in resource-constrained settings who are eligible for IPT or for diagnostic evaluation for TB or other illnesses. Isoniazid should be provided either for six or 36 months duration and performing tuberculosis skin test before prescribing IPT is not a requirement.

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### MOPE0947

**A study to assess willingness of patients living with HIV to access ART/clinical services close to their residence**

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**Background:** ART roll out is being done through ART centers which are located in district hospitals. As a result patients from periphery have to travel long distances to reach ART centers. All these factors have been perceived as potential barriers to an optimum adherence for ART and is a financial burden to HIV patients. The present study looks at distance traveled, cost involved and willingness of patients to access ART/clinical services close to their place of residence.

**Methods:** 156 HIV infected patients (77 males, 79 females) accessing ART center Davangere in south India were interviewed. After taking informed consent, demographic information was collected.

**Results:** Out of 156 patients studied, 72% traveled more than 10 km to access ART center. The average amount of money spent on travelling was 1 USD. Minimum amount spent was 0.25 USD and maximum was 5 USD. 72.43% HIV patients (34.61% male, 37.80% females) were not willing to utilize clinical services close to their residence. Main reason being discrimination by neighbors/co-villagers, if recognized as HIV patient.

**Conclusions:** There is need for effective intervention before scaling up ART services to primary health care level. Advocacy needs to be done with Government road transport service along with private organizations to provide free/ concession in travel fares for HIV patients accessing clinic. We have not considered the loss in daily wages when they travel to access clinic, which is additional financial burden to them. So the government should consider compensating for the loss in daily wages when they access clinic.

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### MOPE0948

**Ending the U.S. ban on federal funding of global and domestic syringe exchange after twenty years: successful advocacy and how to complete the victory**

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**Issues:** Since 1988, the U.S. ban on the use of federal funding for syringe exchange has prevented the adoption of syringe exchange in the U.S. and influenced many other countries to avoid instituting such programs. The President signed a law ending the ban in December, 2009. The coalition of public health advocates, community-based organizations, RAND, and others of the RWWG maintained respectful relationships with groups that dissented or had conflict over major policy differences. The RWWG achieved greater buy-in by reaching out to organizations that had not traditionally worked on advocacy. Unfortunately, 100% consensus was not achievable across the entire HIV/AIDS community so a process was created to allow for “minority opinions.” The RWWG maintained respectful relationships with groups that dissented or had to leave the process. The process of consensus could be replicated by others to urge action and change.

**Next steps:** The RWWG is now monitoring implementation of the legislation, continuing the process of dialogue and exploring the remaining (and new) issues for the next reauthorization. The RWWG experience of a consensus process has also helped achieve progress on other issues besides the CARE Act in which advocacy groups seek greater agreement.

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### MOPE0949

**Exploring the use of consensus as an advocacy tool in reauthorizing the 2009 Ryan White CARE Act: lessons for the future**

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**Issues:** The Ryan White CARE Act (RWCA) provides funding for HIV/AIDS care and treatment for over 500,000 people in the U.S. It must occasionally be “reauthorized” (a process of legislative review). In 2007, the Ryan White Working Group (RWWG), a coalitional advocacy group, sought to create a list of changes of consensus. More than 300 organizations signed onto a “consensus document” which became the basis for a bipartisan, four year reauthorization of RWCA in October 2009.

**Description:** The RWWG began the process of consensus with an in-person community meeting and teleconferences open to all interested parties. The RWWG created a “bucket list” of issues and winnowed the list to issues with a strong chance of success and community support. The RWWG then created a consensus document, sought organizational sign-ons and used the document to pressure the Administration and Congress to act.

**Lessons learned:** The unity behind the “consensus document” was a powerful motivator to action. However, the process of consensus is difficult. Leaders of the process were forced to stop out of their advocate’s role and manage conflict over major policy differences. The RWWG also achieved greater buy-in by reaching out to organizations that had not traditionally worked on advocacy. Unfortunately, 100% consensus was not achievable across the entire HIV/AIDS community so a process was created to allow for “minority opinions.” The RWWG maintained respectful relationships with groups that dissented or had to leave the process. The process of consensus could be replicated by others to urge action and change.

**Next steps:** The RWWG is now monitoring implementation of the legislation, continuing the process of dialogue and exploring the remaining (and new) issues for the next reauthorization. The RWWG experience of a consensus process has also helped achieve progress on other issues besides the CARE Act in which advocacy groups seek greater agreement.

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### MOPE0950

**Catalysing national AIDS responses with enhanced coverage for MSM and TG**

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**Issues:** All around the developing world, evidence shows high HIV incidence and prevalence among MSM and transgender people (TG). This contrasts with low coverage and poor capacity to address their prevention, treatment, care and support needs. In 2009, UNDP supported MSM and TG work in Lesotho, the Philippines and Ukraine. Various programmes and advocacy approaches were used to engage governments and civil society to increase attention and address the needs of MSM and TG in national plans.

**Description:** All projects were implemented with the involvement of Joint UN Teams, national AIDS authorities, local MSM/transgender networks and technical agencies. All programmes included a component on strengthening the evidence on sexual behaviour and access to services. In Lesotho, the survey was extended to women.

Projects were strongly grounded in rights-based approaches, with strong involvement of LGBT leaders, and technical and financial support to strengthen their organisations.

**Lessons learned:** UNDP’s experience in three continents demonstrates that even in countries with no prior government experience of HIV programming for MSM and TG, successes in increasing the evidence and programming can be achieved within a relatively short period of time. In Lesotho, there is now data on the HIV-related needs of sexual minorities. In the Ukraine and the Philippines, a range of providers are receiving training on reducing homophobia within their services.

In the Philippines, the first National MSM conference was organized and MSM and TG are now included in platforms and policy debates regarding rights and the national HIV response.

The successful engagement of governments requires multi-sectoral approaches linking efforts for human rights, research, and programmatic capacity-building.

**Next steps:** To mark the year of universal access, lessons from UNDP’s experience in scaling up national responses for MSM and TG are being documented and shared for expanding coverage of MSM and TG in more countries.

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MOPE0951
Criminalization of same sex practices as a structural driver of HIV risk among men who have sex with men (MSM): the cases of Senegal, Malawi, and Uganda
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Issues: Same sex practices among men remain criminalized in 79 UN mem-
ber states. In many of these settings, including Senegal, Malawi, and Uganda, epidemiologic studies have demonstrated MSM to be at high risk for HIV. There has been an increasing trend of arrests of MSM in Senegal well as a new national bill proposed in Uganda prohibiting the provision of HIV prevention services for MSM and increasing health related fines.

Description: In Senegal, Malawi, and Uganda a participatory policy analysis with MSM (n=85) and other key informants (n=22) was used to examine the downstream effects of the criminalization of same sex among men on both the ability of health care workers to provide HIV services as well as on the uptake of these services among MSM.

Lessons learned: Enforcement of criminal penalties on sex between men has limited the ability of health care providers to offer essential HIV-preven-
tion services for MSM including education, the provision of condoms and water-based lubricants, voluntary counseling and HIV testing, and treatment of sexually transmitted infections in Senegal and Malawi. Similar threats are likely to be seen in Uganda should current proposed laws pass. Where serv-
ices are available, active enforcement of these laws limits uptake of essential programs among entire communities of MSM. Consequently, HIV vulnerabil-
ities among these men, and the population as a whole, are increased.

Next steps: In responding to HIV among MSM, pragmatic public health ap-
proaches are called for which are both evidence based and rights affirming. Punitive law, policies and practices increase vulnerabilities and limit these men’s access to essential services. The HIV/AIDS and public health communi-
ties need to strengthen their advocacy and engagement in supporting evidence-based, comprehensive, and rights affirming approaches for MSM in Africa including efforts for health-erogenous public health laws which criminalize same-sex practices.

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MOPE0952
National policy on HIV/AIDS and the world of work in India - the rationale, process and lessons learned
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Issues: Strengthening National Policy environment of HIV/AIDS Policy and Programme in the world of work was felt necessary as 95% HIV infections in India are reported from most productive age group of 15-49 years; inter and intra country migration for employment enhanced risk of HIV infection, and a need to strengthen the capacity of Ministry of Labour, Employment, employers and workers to engage with National AIDS Control Programme.

Description: Ministry of Labour and Employment (MOLE) with assistance from the ILO undertook advocacy, organized capacity building programmes for key stakeholders, following the ILO Code of Practice on HIV/AIDS and the World of Work engaging people living with HIV. First success came in 2006 when national level employers’ organizations signed their common statement of commitment to HIV/AIDS. In 2007, central trade unions launched their joint statement of commitment. Building upon this, MOLE launched the Na-
tional Policy on HIV/AIDS and the World of Work, developed through a consul-
avative process, involving National AIDS Control Organization, in October 2009. It contains guidelines for employers, workers, in public and private sectors, and highlights roles and responsibilities.

Lessons learned:
1. Process of National Policy development resulted in moving the agenda, enhancing ownership of stakeholders.
2. National action plan for HIV/AIDS Policy for world of work when country already has a national HIV/AIDS Policy was to provide clear guidelines for HIV/AIDS policy and programmes for workers within broad framework of Policy.
3. Engagement of People living with HIV was useful to enhance action in a low prevalence country.
4. Leadership of MOLE played a key role.
5. It is important to develop a Plan of Action to ensure implementation and monitoring of Policy.

Next steps:
1. Implementation of the Plan of Action for effective implementation of Policy.
2. Setting up National Steering Committee to oversee implementation of policy.

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MOPE0953
HIV as an urban rights issue: responding to the concentration of HIV infection in cities in Southern and Eastern Africa requires a spatial understanding of the social determinants of urban health, the drivers of infection, and the range of impacts within and between urban areas
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Issues: HIV infection is concentrated in major urban centres in Southern and East Africa; yet little consideration has been given to the urban nature of the epidemic in national HIV planning. At a city level, HIV is often seen as the problem of the ‘department of health’. As a result, city-level health and develop-
ment strategies are seldom conceptualised to address the social determinants of HIV infection or the intra urban health variations in HIV infection.

Description: UNAIDS research has drawn attention to the urban concentra-
tion of the HIV epidemic in Southern and East Africa. Urban informal settle-
ments are found to have the highest HIV prevalence; in South Africa - for example - HIV prevalence in urban informal areas is double that of urban formal areas. A review of city level planning strategies has highlighted that cities are not responding strategically to the intra-urban variations in the structural drivers of HIV, or to the multiple impacts of HIV on the communi-
ties that they serve.

Lessons learned: Responses to HIV in many of the major cities in the region where HIV infection is concentrated need to be re-conceptualised. Underpinned by revised policies, interventions need to address the spatial variations in HIV infection and the social determinants of health within cities. Strategies must engage with population movements associated with urbanisation - including informal settlements; target areas of high transmision; and impact without stigmatising or compromising the rights and dignity of people living in these areas.

Next steps: A Southern and Eastern Africa Research Network into Cities and HIV (SEARCH) has been established to develop approaches addressing HIV as an urban issue and to encourage national and city leadership to face this challenge. Network members are already involved with an overview study of several cities’ responses in the region and the pilot study in Durban (eThek-
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MOPE0954
Social participation: NGO national meetings on HIV/AIDS and policy implementation in Brazil
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Background: The social participation is one of the principles of the Brazilian Public Health System. It is reflected in the national response on HIV/AIDS, where the government assumes the partnership between government and civil society as one of its pillars. Each year, the brazilian NGOs get together in a National Meeting (ENONG) to deliberate about recommendations on STD/AIDS poli-
cies. This study searched evidences on how these recommendations become part of the national policy.

Methods: The methodology consisted on the comparative analysis of docu-
ments (meetings reports and national strategic plans from the period), under each socio-political context. The data collection occurred from 2007 to 2009 and the analysis was concluded in 2010.

Results: Between 1989 and 2009, 15 national meetings were held. The recom-
endations became important instruments for advocacy, federal govern-
ment adopted most of the recommendations, including the increase of finan-
cial support, the universal distribution of ARVs free of charge and compulsory licensing. Besides, the meetings catalysed support on behalf of the country when its policies were mentioned abroad.

Conclusions: The Brazilian Police on HIV/AIDS is built by an intense social participation. The national meetings are important channels for dialogue and social mobilization. As a result of the support to this strategy, the brazili-
ian response is strengthened: 1) it strengthen relations between NGOs; 2) it strengthen relations between government and civil society; 3) the recom-
endations indicate the needs on HIV/AIDS by users and society’s perspec-
tives; 4) the adoption of the recommendations legitimate the policies that are implemented.

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MOPE0955
Transmission of HIV from male to female intimate partners in and out of marriage in Viet Nam
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Issue: There is a growing concern about the rising rates of HIV infection among married women in the Asian region, including Vietnam. Although Viet Nam has a concentrated epidemic, little is known about HIV transmission be-
tween male to female intimate partners in and out of marriage.

Description: In response to growing concern about rising rates of HIV infec-

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MOPE0956

If you want HIV legislation, ask labour: how unions and employers contribute to the adoption of the national AIDS law in Paraguay

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Issues: In 2003, a National Committee was formed to push for legal reforms on HIV/AIDS. As a result of this advocacy, a new AIDS law was adopted in 2009. This achievement was due, in part, to the fact that the Committee gradually included important sectors of society not initially considered “relevant” to HIV/AIDS. One of these sectors was Labour. Ultimate Labour played a crucial role in the development and adoption of the new legislation.

Description: The National Committee was initially composed of representatives from the Ministry of Health, health NGOs, and organizations of people living with HIV/AIDS. As consultations continued, the Committee expanded its membership. By 2009, it had also included human rights networks, academic, religious and political leaders. Also in 2007, the International Labour Organization (ILO) launched a project with its partners on “Strengthening the World of Work’s Response to HIV/AIDS in Paraguay.” It brought together union leaders, employers, and government officials from the Ministry of Justice and Labour in a dialogue on HIV/AIDS issues. This dialogue raised awareness of Labour’s essential role in the development of public policies. In 2009, the Committee invited representatives of all sectors - including a highly motivated Labour - to jointly design an advocacy strategy, which was implemented successfully. This multi-sectoral approach tipped the scales of public support. The new HIV/AIDS law promulgated in December 2009 takes account of the world of work.

Lessons learned: The Paraguay example demonstrates that purely health-focused initiatives can limit the scope of legislation and overlook crucial alliances needed to pass essential legislation.

Next steps: The ILO is working with the Ministry of Justice and Labour, union workers and business associations to disseminate and effectively implement the new law.

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MOPE0957

Advocacy case study: prioritizing men who have sex with men (MSM) and other sexual minorities in the President’s Emergency Plan for AIDS Relief (PEPFAR)

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Issues: In low- and middle-income countries, men who have sex with men (MSM) are 19 times more likely to be infected with HIV than the general population. As one of the largest providers of HIV-related funding and services around the world, the President’s Emergency Plan for AIDS Relief (PEPFAR) has a key role to play in ensuring that MSM and other most-at-risk populations are a priority in the global response. The 2008 reauthorization process of the law enacting PEPFAR and the 2009 effort to write a new five-year strategy for the program provided two key opportunities to make MSM an explicit priority population in PEPFAR.

Description: Advocacy efforts by The Global Forum on MSM & HIV (MSGF) and others in Project Los Angeles beginning in the fall of 2007 targeting members of U.S. Congress helped lead to the inclusion of language on HIV prevention specifically for MSM in the 2008 law reauthorizing PEPFAR. Building on these efforts, APLA and the MGFen undertook a range of initiatives toward the prioritization of MSM in the new strategy, including: organizing congressional hearings on MSM and the global HIV epidemic; face-to-face meetings with key policy makers; convening a D.C.-based policy working Group on HIV and Other Sexual Minorities and spearheading efforts to submit recommendations on the five-year strategy. The PEPFAR five-year strategy published in December 2009 explicitly prioritizes MSM.

Lessons learned: Critical factors that led to prioritizing MSM in PEPFAR legislation and policy included strong champions in U.S. Congress, cooperation with key allies in the advocacy community, growing data on HIV among MSM in the global south; and expert testimony from advocates on the ground.

Next steps: Efforts to ensure that high level policy language on MSM in PEPFAR’s five-year strategy translates into effective implementation on the ground will be an important measure of the continued investment in HIV prevention work among MSM.

MOPE0958

Advocacy and lobbying by civil society, affected communities and people living with HIV

Advocacy and lobbying by civil society, affected communities and people living with HIV: MOPE0959—MOPE0992

MOPE0959

Community led advocacy: improving the quality of life for people living with HIV in Yunnan province, China

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Issues: Since year 2004, the Chinese government’s “Four Frees One Care” policy has provided free antiretroviral medications (ARVs) to people living with HIV (PLHIV). However, this policy excludes treatment for opportunistic infections (OIs) or management of ARV-related side-effects. Limited finances prevent many PLHIV from seeking treatment for OIs/side-effects; thereby leading to poor health outcomes and premature death. PLHIVs have identified this as a negative influence in their lives.

Description: In 2008, USAID/Health Policy Initiative, Greater Mekong Region/China provided advocacy training and grants enabling community groups to conduct advocacy. A survey was undertaken to identify barriers to ARV treatment. Of 75 patients sampled, 57 met criteria for ART and 22 received ART. Of these, 17 experienced side-effects. Of the 15 requiring treatment for side-effects, only 5 received treatment. The remaining 10 lacked money for treatment and, as a result, 8 stopped ARV treatment. The 20% of patients who met the requirements for ART were reluctant to consider ART because they lacked money for the management of side-effects. The findings including an analysis of why subsidized treatment of side-effects/ OIs was beneficial to both PLHIV and the health system were presented to policy makers. Subsequently, the AIDS Office indicated they will consider providing funding for ART-related side-effects beginning January 2010.

Lessons learned: 1. Community organizations can identify issues impacting directly on the health and well-being of PLHIV.
2. Capacity building enables these groups to advocate for improved access to services.
3. Local government are receptive to hearing the concerns of their constituents and willing to work with advocates to find solutions.
4. Translating local-level gains into higher level policy reform remains challenging.
MOPE0960

Awareness, advocacy and human rights based approach as a tool for improving existing health care facilities to cater to lesbians, gay, bisexuals, transgender and intersex (LGBTI) community in Kenya

G.V. Owino
ISHTAR MSM, Health, Nairobi, Kenya

Issues: Kenya continues to have laws that condemn homosexuals, a medical curriculum that identifies them as “diseased” and a health care system that discriminates and stigmatizes them. This has made the LGBTI community shy away from accessing treatment and demanding representation in planning and priority-setting processes for HIV/AIDS. As a result less or no resources are devoted to programs targeting them and thus the widening incidence of HIV among them.

Description: Two data collection methods were used a) Qualitative Survey here questionnaires and oral interviews where the data collection tools; respondents where from the medical profession, and LGBTI community which including organizations and individuals aged between 18 to 65 years. Most where contacted through a forum and within their organizations. b) In-depth interviews conducted after a forum that was aimed at strengthening the capacity of health care providers to safeguard the rights of sexual minorities. A total of 150 and a number of 60 people including health care providers, LGBTI people, medical students and human rights activists from Nairobi and its neighbourhoods were interviewed.

Lessons learned: It was noted that Kenya has unacceptably few friendly LGBTI health centers, HIV/AIDS and also STI programs. However, through a forum bring them together with health workers, medical students and human rights activists, attitudes and perceptions were changed, position softened and a call for human rights based approach be applied when giving treatment agreed on. Some health care workers even volunteered their time to advocate for them to their colleagues and policy makers.

Next steps: As a way forward a call was made for more forums, to be conducted across the country to educate and advocate health workers and medical students on the human rights of LGBTI people, in order to make health care accessible to them and reduce the HIV prevalence.

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MOPE0961

Tools to improve health care for sexual minorities in Kenya

G.V. Owino
ISHTAR MSM, Health, Nairobi, Kenya

Issues: Kenya continues to have laws that condemn sexual minorities, a medical curriculum that identifies them as “diseased” and a health care system that discriminates and stigmatizes them. This has made the LGBTI (lesbians, gay, bisexuals, transgender and intersex) community who are sexual minorities, shy away from accessing treatment and demanding representation in planning and priority-setting processes for HIV/AIDS. As a result less or no resources are devoted to programs targeting them and thus the widening incidence of HIV/AIDS among them.

Description: Assessment conducted to inform program implementation using a sample of 125 people who included health care workers, LGBTI individuals, and medical students from Nairobi and its neighbourhoods. 40 filled open-ended self-guided questionnaires, 60 attended a forum aimed at strengthening the capacity of health care providers to safeguard the rights of sexual minorities, and 25 gave oral and in-depth interviews. Data presented is from the interviews, questionnaires and forum views.

Lessons learned: Respondents said Kenya neither has health centres or hospitals where they can receive treatment without stigma and discrimination nor HIV/AIDS and STI prevention programs. Following a forum brought LGBTI people, health care workers, medical students and human rights activists together, it was found that attitudes and perceptions can be changed by awareness, advocacy and human rights based approach being applied as tools to improve and strengthen the capacity of health care workers to safeguard the rights of sexual minorities.

Health care workers in attendance were ready to treat LGBTI people better and ensure that they get access to them to their colleagues and gave suggestions that their training curriculum be changed.

Next steps: Skills are needed by health providers in handling LGBTI patients while programs implementers can utilize skills demonstrated in this session for improved understanding and relationships between providers and LGBTI people.

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MOPE0962

GIPA/MIPA in governance and service delivery - case of The AIDS Support Organisation (TASO) Uganda

E. Wanyenze Muloni
The AIDS Support Organisation (TASO), Advocacy & Networking, Kampala, Uganda

Issues: Despite the adoption of GIPA in 1994, few Organizations have actually integrated the idea into their programs due to implementation challenges. Consequently, People Living with HIV/AIDS (PHAs) are still directly experiencing factors that make individuals and communities vulnerable to HIV infection.

Description: Since inception, The AIDS Service Organization (TASO) has always been run in line with MIPA/GIPA principles. The MIPA/GIPA concept was formally included in TASO’s nine Goal Strategic Plan 2008-2012 to streamline effective PHA participation. It also involved incorporation of Clients (PHAs) on TASO’s Board of Trustees, formation of advisory committees and client council members at the all service centers, involvement of communities, formation of drama groups who spearheaded social marketing and health education campaigns in communities. Various activities have been assigned particularly for PHAs to implement with support from TASO staff.

Lessons learned: TASO formed 15 members on BD, 11 client advisory committees across all the TASO units to boost the self-esteem and morale of PHAs in their work by demonstrating that they are productive members of and contributors to the society. Client groups have played key roles in TASO governance, strategic, tactical and operational levels. Several issues in relation to their livelihood have been raised that led to formulation of new policies and revisions as a result of their inclusion in diverse committees which has streamlined TASO activity implementation.

Next steps: GIPA principle should be promoted to PHAs and all HIV service providers. Networking for PHA community groups for sustainability of their projects should be encouraged and empowerment in various skills is crucial.

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MOPE0963

Improving HIV programs using participatory monitoring; evaluating the capacity of PLHIV networks to gather, analyze, and use evidence to engage in policy dialogue

S.D. Dao1, K. Morrison2, K. Guarnieri1, E. Mattal3, C. Teter4

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Issues: Countries have made great strides in meeting prevention, treatment, and care and support goals. Access to quality HIV services and widespread stigma and discrimination remain key barriers to effective implementation. The need to increase involvement of PLHIV in Vietnam has been voiced by many stakeholders including the Vietnamese government. Unfortunately, PLHIV still lack the critical skills needed to carry out effective advocacy and engage policy makers in dialogue.

Participatory monitoring mechanisms have shown tremendous promise for strengthening policy implementation. The Vietnamese Network of People living with HIV (VNPN+) and priority-setting processes for HIV/AIDS. As a result less or no resources are devoted to programs targeting them and thus the widening incidence of HIV/AIDS among them.

Description: Assessment conducted to inform program implementation using a sample of 125 people who included health care workers, LGBTI individuals, and medical students from Nairobi and its neighbourhoods. 40 filled open-ended self-guided questionnaires, 60 attended a forum aimed at strengthening the capacity of health care providers to safeguard the rights of sexual minorities, and 25 gave oral and in-depth interviews. Data presented is from the interviews, questionnaires and forum views.

Lessons learned: Respondents said Kenya neither has health centres or hospitals where they can receive treatment without stigma and discrimination nor HIV/AIDS and STI prevention programs. Following a forum brought LGBTI people, health care workers, medical students and human rights activists together, it was found that attitudes and perceptions can be changed by awareness, advocacy and human rights based approach being applied as tools to improve and strengthen the capacity of health care workers to safeguard the rights of sexual minorities.

Health care workers in attendance were ready to treat LGBTI people better and ensure that they get access to them to their colleagues and gave suggestions that their training curriculum be changed.

Next steps: Skills are needed by health providers in handling LGBTI patients while programs implementers can utilize skills demonstrated in this session for improved understanding and relationships between providers and LGBTI people.

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MOPE0962

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The AIDS Support Organisation (TASO), Advocacy & Networking, Kampala, Uganda

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Next steps: GIPA principle should be promoted to PHAs and all HIV service providers. Networking for PHA community groups for sustainability of their projects should be encouraged and empowerment in various skills is crucial.

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MOPE0963

Improving HIV programs using participatory monitoring; evaluating the capacity of PLHIV networks to gather, analyze, and use evidence to engage in policy dialogue

S.D. Dao1, K. Morrison2, K. Guarnieri1, E. Mattal3, C. Teter4

1Vietnamese Network of People Living with HIV/AIDS (VNPN-), Nanoi, Viet Nam, 2Futures Group International, Health Policy Initiative, TO1, Mexico, 3OF, Mexico, 4Futures Group International/THe Global Fund to Fight AIDS, Tuberculosis and Malaria, Asia and the Pacific, Geneva, Switzerland, 5Futures Group International, Health Policy Initiative, TO1, Washington, United States

Issues: Countries have made great strides in meeting prevention, treatment, and care and support goals. Access to quality HIV services and widespread stigma and discrimination remain key barriers to effective implementation. The need to increase involvement of PLHIV in Vietnam has been voiced by many stakeholders including the Vietnamese government. Unfortunately, PLHIV still lack the critical skills needed to carry out effective advocacy and engage policy makers in dialogue.

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Health care workers in attendance were ready to treat LGBTI people better and ensure that they get access to them to their colleagues and gave suggestions that their training curriculum be changed.

Next steps: Skills are needed by health providers in handling LGBTI patients while programs implementers can utilize skills demonstrated in this session for improved understanding and relationships between providers and LGBTI people.

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**MOPE0964**

An exploratory study on the opportunities to improve the incorporation of the GIPA principle in STOP AIDS NOW! partner programs and development projects

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**Issues:** Organisations of people living with HIV have a key role when it comes to implementing the GIPA principle. They are the ones who represent the interests of PLHIV and give them a voice. With this exploratory study STOP AIDS NOW! (SAN!) aimed to gain more insight in the role of these organisations in achieving GIPA and contributing factors.

**Description:** The study focused on the capacities of PLHIV organisations (n=19) and the relationships between these organisations and SAN! partners and cooperating organisations.

**Lessons learned:** The outcomes show that GIPA is far from being a common practice. Fear of stigma and discrimination are considered the most important barriers for PLHIV to make their voices heard. Government institutions and all kinds of development organisations show low level of understanding of GIPA. Although in all countries included (n=13) national AIDS policies have been developed, GIPA is seldom present or applied, due to lack of resources and skills and lack of understanding what GIPA is about. Often staff members of PLHIV organisations are not aware of the GIPA principle, do not understand what it is and how it could be applied. In development organizations, involvement of PLHIV is often hindered by funding constraints, low skill levels of PLHIV, poverty and lack of workplace policies as enabling environment.

**Next steps:** Skills building and tools to enhance GIPA should be provided to all. In short, it is, in particular donors. Support for institutional and organisational development of PLHIV organisations should be provided based on needs assessment. Tailored capacity building will improve participation, such as inclusion of minorities and attention to gender issues. PLHIV organisations should be supported to join forces to perform advocacy at national level. SAN! partners should review their HIV policy to ensure GIPA is addressed in programmes and their commitment to the GIPA principle is translated into practice.

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**MOPE0965**

Voice of people living with HIV and AIDS: construction making process in Zimbabwe

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Zimbabwe National Network of People with HIV and AIDS (ZNNP+), Harare, Zimbabwe

**Issues:** People living with HIV and AIDS in Zimbabwe face grave challenges in accessing treatment, social services, basic health care, education, and other socio-economic rights. Out of a total 12.5 million people, over one million people are infected with the HIV and most vulnerable are women and children. As a result, the National HIV/AIDS, Human Rights and Law Advocacy Roundtable, which is facilitated by the Network of People Living with HIV and AIDS (ZNNP+) including its partner support groups call upon Zimbabwean and transitional government of national unity to address issues of health rights in the new constitution's Bill of Rights.

**Description:** People living with HIV and AIDS request that they be represented and meaningfully engaged at every level of the constitution making process. This is a new initiative identifies the right to health as extending the provision of adequate quality health care, diagnostic testing, access to treatment, free treatment, and the right to the reinstitution of resources. The Bill of Rights should also include the right to food, shelter, and the right to clean water and sanitation. Children in prisons must be provided with free and uninterrupted anti-retroviral therapy, adequate food and access and to other HIV prevention, treatment and care services. The informal sector is unique in that members are more mobile and operate in commercial sex settings, yet their vulnerability go unnoticed.

**Lessons learned:** Through consultative process of workplace policy development and implementation, NISCO has been able to engage workers in the informal sector throughout the country in national HIV and response through workplace strategies. A bold, consolidated approach and committed member-ship at grassroots levels throughout the country has helped position NISCO as a major player in the national HIV response and in recognizing the vulnerability of the workers in the informal sector. Based on the foundation already laid, there is need to roll out implementation of the policy already developed.

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**MOPE0966**

Has the Global Fund strengthened civil society HIV advocacy in the former Soviet Union?

A study in Georgia, Kyrgyzstan and Ukraine

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**Background:** The Global Fund (GF) and other international donors are increasingly funding civil society organisations (CSOs) to implement HIV programmes. It is assumed that CSOs deliver effective pre- and intervention programmes to marginalised groups, can hold governments to account for HIV policies and can advocate for marginalised groups’ rights. This paper presents findings from a study on the effects of the GF in three former Soviet Union countries: Georgia, Kyrgyzstan and Ukraine. This special issue on the role of donor funding and the substantial impact of GF funding has strengthened CSOs’ ability to advocate on and influence restrictivist drug policies. This study explored how GF funding has influenced partners’ capacity to deliver prevention services in these low/concentrated epidemic countries.

**Methods:** A systematic thematic analysis was conducted of 25 in-depth qualitative interviews in each country (total 75) with CSOs and national level decision makers.

**Results:**

- The studies show GF programmes have enabled CSOs to engage in HIV country coordination and implementation regardless of ownership. However, GF funding constrains CSOs’ ability to challenge government on the contentious issues surrounding drugs policies.
- In Ukraine two CSOs acting as GF Principal Recipients have catalysed significant CSO advocacy that has actively challenged government drug policies including penalties for possession and introducing harm reduction services in prisons; in Georgia and Kyrgyzstan government agencies are Principle Recipients, where CSO capacity is more subdued.
- At the local level GF-funded CSOs are actively advocating for changes in the ways drug laws are implemented resulting in some improvements in discriminatory practices towards drug users and other vulnerable groups among law enforcement agencies.

**Conclusions:** The Global Fund and other donors urgently need to step up efforts to catalyse changes in prohibitionist drugs policies and their implementation.

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**MOPE0967**

HIV and AIDS workplace policy as an effective strategy for engaging workers in the informal sector in the HIV and AIDS response

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**Issues:**

- The informal sector in Kenya employs over 7.2 million people and contributes to over 18% of the national GDP. Informal sector workers are more mobile, less organized and less audible than their formal sector counterparts. Efforts to curb the pandemic have not been effective in reaching the informal sector and the impact of HIV and AIDS is especially acute in terms of job losses and income security.

**Description:**

- The Kenya National Informal Sector Coalition (NISCO), an umbrella business membership organization, implements a comprehensive HIV and AIDS workplace program for informal sector workers, entrepreneurs and their associations. NISCO mobilized its members throughout the country to develop “an HIV and AIDS Workplace Policy for Kenya’s Informal Sector”. This guide for programming, the first in East Africa, including mobile counselling and testing, human rights at workplace, stigma and discrimination reduction and access to other HIV prevention, treatment and care services. The informal sector is unique in that members are more mobile and operate in commercial sex settings, yet their vulnerability go unnoticed.

- Through consultative process of workplace policy development and implementation, NISCO has been able to engage workers in the informal sector throughout the country in national HIV and response through workplace strategies. A bold, consolidated approach and committed membership at grassroots levels throughout the country has helped position NISCO as a major player in the national HIV response and in recognizing the vulnerability of the workers in the informal sector. Based on the foundation already laid, there is need to roll out implementation of the policy already developed.

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**MOPE0968**

The smart sex workers guide to ensuring meaningful participation in policy development: the global network of sex work projects (NSWP) response to the UNAIDS guidance note on HIV and sex work

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**Issues:** NSWP was established in 1992 by sex worker rights activists working within sex work projects around the world with the goal of raising sex workers voices in HIV policy and programming. In 2007 the NSWP and regional networks rejected the draft UNAIDS Guidance note on HIV and Sex Work, calling for it to be rewritten in line with human rights principles that respect the rights of sex workers. In June 2007 the UNAIDS Programme Coordinating Board required UNAIDS to respond to concerns raised by the global network of sex work projects (NSWP) in a revised UNAIDS Guidance note on HIV and Sex Work, which was released in March 2009. NSWP welcomed many of the revisions, they felt that the ambiguities in the document could create significant barriers to...
MOPE0969

Taking vulnerable child advocacy to scale: lessons from a six-country experience in East and Southern Africa

R. Wamimbi1, S. Kean2


Issues: Advocacy for vulnerable children affected by HIV in Eastern and Southern Africa undertaken by civil society has not been scaled up due to limited resources and skills. Progress has been made over the past four years in six countries participating in the vulnerable child advocacy (VCA) programme implemented by World Vision International.

Lessons learned: The scale up of VCA civil society participation at community, national, and international levels in developing and implementing policies, programmes and projects that have a direct impact on HIV/AIDS on children. VCA lessons were documented through regular meetings and discussions of the VCA Advocacy Committee and by conducting specific exercises to document good practices. The VCA programme has developed a model, resource materials and enhanced the capacity to scale-up advocacy for vulnerable children in Africa. Participating communities can now identify, analyze and develop action plans on issues that affect the well being of children including: inheritance rights, child labour, birth registration, budgetary allocations for OVC, and sexual exploitation.

Next steps: Civil society organizations can undertake meaningful advocacy that changes local attitudes and government policies on issues that make children vulnerable to HIV. It is necessary to disseminate lessons learned and form new partnerships for vulnerable child advocacy to be scaled up further.

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MOPE0970

Drug user involvement in policy change in the United States

A. Clear, D. Raymond, H. McGuie

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Issues: Drug users and people with histories of drug use have been a driving force behind HIV/HR reduction policy and service change in the United States. However, drug users and people with drug histories who are involved in harm reduction activities have been largely ignored.

Lessons learned: Self advocacy by the impacted population has long been a central tool in effecting change in HIV policy and increasing social services for people with or at risk of acquiring HIV. In the United States strategic advocacy alliances involving activists, government employees, researchers and funders have been the backbone of change. Without the catalytic effect of activism, these alliances would have been weaker and less responsive to community needs. Drug users and those with histories of drug use have comprised a significant segment of the activist community. However, experience has shown that their voices and influence are often diminished if their drug use status were generally known. This presentation will provide examples of leadership from the drug using community.

Lessons learned: Institutional stigma towards drug users can delegitimize and devalue the lives and efforts of individuals involved in creating HIV/HIV/AIDS services in the United States. Through negotiating strategies of disclosure and concealment, marginalized identities, individuals with a history of drug use have effected significant change in the United States and should be recognized.

Next steps: Understanding the role of members of stigmatized groups in advocacy and policy change produces richer, more complete, and more empowering accounts of HIV/AIDS histories and processes of change.

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MOPE0971

The role of drug user community in changing a better drugs policy in Indonesia

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Issues: Harm reduction principle in the new narcotic law.

Description: Since 2005, Indonesian government started to revise the old narcotic act (1982) with huge amount of illicit drugs trafficking and drug users in Indonesia. Unfortunately, the government still used security approach to handle illicit drugs demand at home. As a result, drug users as victims of illicit drugs market were still criminalized in the new narcotic bill.

In other hand, drug user communities were grown bigger and bigger in Indonesia. They also started to have enough knowledge about the linkage between criminalization and HIV transmission among injecting drug users. They learned from other countries experience that public health approach was better to use rather than security approach in handling drug user in Indonesia. To recommend the idea of using public health approach in the new drug user community started to build alliance with human rights and legal aid organization and started to demand the government to implement the idea through series of lobbying, campaign, and legal advocacy works.

As the result, the new narcotic act (act no.35/2009) put rehabilitation for drug users as a main purpose of regulating the act. The act itself was started to implement harm reduction principle to cut HIV transmission among injecting drug users.

Lessons learned: The involvement of drug user community is a main key of success in changing narcotic policy in Indonesia.

Next steps: Drug user community has still to monitor and involve in arranging the implementation regulation of the new narcotic act to ensure the implementation of harm reduction principle. A new strategy is needed to approach toward drug user to cut or at least decrease HIV transmission among injecting drug users.

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MOPE0972

Human rights training as a catalyst for social justice in Democratic Republic of Congo

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Issues: Building the capacity of civil society organisations (CSOs) on HIV and Human rights can be a catalyst for achieving social justice and legal reform and provide protection against rights violations against PLHIV and other marginalized communities.

Description: ARASA, a partnership of over 40 human rights and HIV/AIDS organizations working together in SADC and the Indian Ocean Islands to promote a rights based response to HIV and TB, has worked with Protection Infant Sida (PIS) an NGO in DRC since 2008 to conduct human rights (HR) training and advocacy initiatives across 13 provinces in DRC. 328 human rights activists were trained in 2008/9. 27 were openly living with HIV and 119 were woman.

Lessons learned: Training on HIV and human rights in the DRC has increased the capacity of community based activists to promote a rights based response to HIV. In 2008, lobbying of Senate by CSO representatives who had attended ARASA/ PES HIV and HR training workshops resulted in the reduction of the penalty provided for in the proposed HIV Bill for willful transmission from life imprisonment to 7 years. Lobbying of the director of prisons in Kinshasa and Mbandaka by participants of regional HIV and HR trainings resulted in the incorporation by the prison service in DRC of engagement in social work in prison and on health care for HIV+ prisoners.

Next steps: Training programmes on HIV and HR in the DRC must be expanded to ensure that CSOs are better equipped to promote a rights based response to HIV that is critical for effective prevention, treatment and support programmes.

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MOPE0973

Advocacy from positive community improved the care and treatment environment in Tianjin China

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Tianjin Hai River Star Positive People Supporting Group, Tianjin, China

Issues: In 2006, “free medicine and free test” policies did not implemented in Tianjin. People living with HIV had to pay test fee, CD4 test fee and other fees. If their households were not in Tianjin, they could not get free ART medicines. There was no hospital department with HIV/AIDS histories and processes of change.

Next steps: Understanding the role of members of stigmatized groups in advocacy and policy change produces richer, more complete, and more empowering accounts of HIV/AIDS histories and processes of change.

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Abstract Book Volume 1 | www.aids2010.org

271
MPOE0974
"Campaigning for Universal Access" - action against AIDS, Germany - a network is heard!

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Issues: In 2009, 42% percent of the 9.5 million people living with HIV/AIDS who were in need of life-saving antiretroviral therapy (ART) had access to it. Although we are still far from having reached universal access, tremendous progress has been made. This progress has also been due to the work of civil society organisations.

Description: Action against AIDS (Aga) is a German network of more than 100 NGOs and faith-based organisations and 270 grass root groups. Since 2002, the network has advocated for appropriate German government support for universal access and put pressure on the pharmaceutical industry to reduce prices and accept the full use of public funds. The network has been involved in the steering committee for the Doha Declaration. The campaign is now an important role in advocating for universal access which includes access to generic ART and increased donor funding. When civil society organisations join hands and speak with one voice, governments and pharmaceutical companies are made to react. Detailed monitoring showed that the German ODA disbursements for confronting HIV in developing countries increased from less than 140 million € in 2003 to roughly 200 million € in 2007. According to preliminary estimates this amount has approached 300 million € in 2008. A number of pharmaceutical companies have started to change their ways of doing business and accept greater social responsibility.

Next steps: In view of the increasing resource needs and the fact that the German contribution still remains well below its fair share, Aga will reinforce its advocacy efforts. It will also continue to put pressure on the pharmaceutical industry to increase access and improve the quality of medications. In 2009, the network met in Quito. It is planned to meet again in 2010.

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MPOE0975
Poz&Proud: bringing "sexy" back into grassroots advocacy for HIV-positive gay men (HPGM) in the Netherlands: claiming (sexual) rights, regaining lost territory

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Issues: After the introduction of cART the needs of HPGM in the Netherlands seemed to be adequately addressed by Dutch ASOs. But as life-expectancy grew, the challenges faced by HPGM became more urgent. Self- and other stigma’s profoundly affected many HPGM, while HIV almost became invisible within the gay community. Both Aids Services Organisations (ASOs) and gay community needed sensitization to the needs of HPGM, who themselves needed empowerment. Therefore a group of HPGM in the Netherlands formed Poz&Proud to re-emphasize HIV/AIDS issues within the gay community and to lobby for better social care arrangements. The program facilitated the first access for HIV-positive women in Ukraine to a state MCC, in Donetsk. The project demonstrated the importance of housing for HIV-positive mothers and their children, and identified successful strategies for advocacy to increase access to such services.

Lessons learned: The program facilitated the first access for HIV-positive women in Ukraine to a state MCC, in Donetsk. The project demonstrated the importance of housing for HIV-positive mothers and their children, and identified successful strategies for advocacy to increase access to such services.

Next steps: Healthright plans to train government social service providers nationally to ensure that Ukraine’s public entitlement system is free from discrimination, and conduct advocacy to make housing a priority among agencies serving HIV-positive children.

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MPOE0976
Beyond MAMA+: advocacy for HIV-positive women’s access to state social services in Ukraine

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Issues: Ukraine faces a rapidly growing HIV epidemic; 45% of its HIV-positive women are people of reproductive age. Although legislation guarantees free health care and forbids discrimination, HIV-positive women, particularly when pregnant, are vulnerable to challenges in accessing government entitlements. HealthRight’s MAMA+ program provides comprehensive support to HIV-positive pregnant women and mothers. MAMA+ has been effective in empowering HIV-positive mothers, with 95% of client children having HIV-positive in a context where up to 20% of children born to HIV-positive mothers are abandoned. However, research conducted by Healthright in 2006 revealed that 92% of HIV-positive pregnant women and new mothers surveyed lacked their own housing. Further, their HIV status disqualified them from crisis housing at State Mother and Child Centers (MCCs). Lack of housing served as a major contributor to instability and child abandonment.

Description: Healthright implemented an intervention to highlight and reduce the challenges faced by HIV-positive women in accessing housing in Ukraine. This project - worked with government partners to eliminate barriers preventing HIV-positive mothers from accessing state benefits, and increase awareness of discrimination.

Lessons learned: The program facilitated the first access for HIV-positive women in Ukraine to a state MCC, in Donetsk. The project demonstrated the importance of housing for HIV-positive mothers and their children, and identified successful strategies for advocacy to increase access to such services.

Next steps: Healthright plans to train government social service providers nationally to ensure that Ukraine’s public entitlement system is free from discrimination, and conduct advocacy to make housing a priority among agencies serving HIV-positive children.

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MPOE0977
HIV leadership through accountability programme

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Issues: The “HIV Leadership through Accountability” Programme is funded by the United Kingdom Department for International Development (DFID) Governance and Transparency Fund (GTF). It combines specific evidence-gathering tools, national AIDS campaigns and targeted advocacy for good governance and Universal Access to HIV prevention, treatment, care and support.

Lessons learned: The program facilitated the first access for HIV-positive women in Ukraine to a state MCC, in Donetsk. The project demonstrated the importance of housing for HIV-positive mothers and their children, and identified successful strategies for advocacy to increase access to such services.

Next steps: The national networks of PLHIV involved will be campaigning, advocating and lobbying based on the results in order to inform national planning processes. In addition they will mobilise resources to conduct further research and increase capacity of the networks and civil society partners. The presentation will further detail the outcomes and the resulting advocacy in detail.

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MOPE0978
Developing advocacy programs for implementing organizations to dramatically increase access to PMTCT and pediatric HIV/AIDS services
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Issues: As PEPFAR implementing organizations seek to dramatically increase access to PMTCT and pediatric treatment services in countries hardest hit by the global HIV/AIDS pandemic, the need for in-country advocacy and communication strategies to complement and strengthen on-going programmatic work is clear. However, for implementers that work in close collaboration with Ministries of Health and U.S. missions, it can be challenging to develop powerful and effective advocacy messages and campaigns that satisfy all partners. In 2008/2009 the Foundation began advocacy work in select countries – Tanzania, Kenya, Rwanda and Zambia – developing advocacy goals, strategies and tactics in each country, crafting strategic messages, strengthening media outreach, creating and solidifying partnerships and defining core audiences, all with the goal of eliminating pediatric AIDS worldwide. Each country has identified specific needs and unique approaches to their advocacy work, based on the contours of their country’s pandemic, the government response and strategies developed by both donors and the local advocacy and treatment services.

Description: This presentation will examine the process and challenges related to crafting country-specific advocacy and communications strategies that will provide a review of relevant experiences in Tanzania, Kenya, Rwanda and Zambia, comparing strategies developed to raise awareness of PMTCT and pediatric care and treatment services.

Lessons learned: When undertaking strategic development of advocacy and communication campaigns, including development of goals, strategies, tactics, media outreach, and key messages, implementing organizations must thoroughly understand the political and public health contexts of the countries in which they are operating.

Next steps: Advocacy experiences, women, families, and “key influencers” in each country have showed great interest in initial advocacy outreach efforts building greater momentum toward increased PMTCT and pediatric treatment access. Implementing organizations will continue to develop relevant advocacy and communications strategies in countries that have a demonstrated need.

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MOPE0979
Campaign human rights and HIV/AIDS: now more than ever
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Issues: The necessity for full execution of the rights and fundamental freedoms is a very important element of global fight against HIV/AIDS, as protection of public health is possible only through protecting all human rights.

Description: Open Society Institute Assistance-Armenia and the OSI Law and Health Initiative supported a campaign in two cities of Armenia, Vanadzor and Gyumri, from December 4 to 6 devoted to the International Day of HIV/AIDS. The campaign focused on 10 reasons mentioned in the OSI produced declaration on human rights and HIV/AIDS. Now More Than Ever, endorsed by over 600 organizations worldwide, calling on governments and international donors to protect the human rights of stigmatized groups. The Foundation and a coalition of human rights and AIDS organizations organized round table discussions on HIV and human rights with participation of high-level officials, international and governmental organizations, as well as activists and people affected by the epidemic to address the critical need of including human rights in the AIDS response. A number of organizations dealing with advocacy of vulnerable groups, such as “HCA Vanadzor”, “Anti-drug Civil Union”, “Real World, Real People”, “Need for public information and knowledge” and Hope and Help NGOs took part in the campaign.

Lessons learned: About 40 high-level officials, international donors, non-governmental organizations, as well as activists and people affected by the epidemic participated in the discussions. The society had an opportunity to raise their voice and express their concerns through TV programs related to violation of rights of marginalized population.

Next steps: The campaign is an ongoing activity. It is planned to organize similar events every year in other regions of Armenia involving more people in the campaign. As a result, it will help to create tolerance towards vulnerable groups affected by HIV and to protect their rights.

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MOPE0980
Participation of women and transgenders in Advocacy Efforts in Latin America and the Caribbean (LAC)
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Background: A quick review of CCMS in LAC suggests that women are certainly present in all CCMs, and that most of them reflect gender balance among the CCMS. This preliminary study seeks to determine the extent of participation of women and transgenders in Global Fund processes throughout the LAC region, and highlight existing challenges and barriers that serve as constraints to achieving effective participation. The report also highlights current good practices throughout the region, and indicates where improvements and changes are needed.

Methods: The study was guided by a qualitative approach that aimed to identify different perceptions regarding the quality of participation of women in regional, public health, women living with HIV, female sex workers and transgenders in Global Fund processes. Data was collected between July and November of 2009 through interviews to CCMS members and leaders, and focus groups with the populations mentioned above.

Results: Female sex workers and transgenderers’ participation has improved in the past two years. WLHIV remain invisible due to their participation as part of the people leaving with HIV groups, which prevent them to express their particular needs as WLHIV.

Conclusions: The study suggests that women have an agenda to bring to CCMS. In most cases CCMS seek civil society participation in order to comply with Global Fund requirements (rubber-stamping). Whether it is a workshop at the beginning of the process, an open call for proposals, or a final validation workshop with different stakeholders, women and transgender consider their needs are not included in the final proposal.

Even though most of proposal included activities with WLHIV, female sex workers and transgender, they haven’t been able to access the resources as sub-recipient. Their organizations are generally weak in administrative and financial processes.

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MOPE0981
Policy dialogues as a transformative tool for HIV and TB responses
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Issues: Over the years, HIV has managed to put human rights on the spotlight in southern Africa. People living with HIV (PLHIV) BTB and their partners have demanded their rights as human beings and not as patients. This has created an opportunity for community involvement in policy transformation through dialogue and debate, to engage with policy makers and bring about the desired results.

Description: SAAIDS developed a policy dialogues methodology and rolled it out 2008-2009 through a project in collaboration with networks of people living with HIV (PLHIV) from 9 southern African countries to conduct in-country Policy Dialogues that address HIV and TB related issues. A Policy Dialogue is a 1-day meeting of policy makers, community leaders, people affected by an issue and key stakeholders working in a particular field of concern such as HIV and AIDS. Policy dialogues were held in Zimbabwe, Malawi, Zambia and Mozambique.

Results: The Zimbabwe dialogue resulted in the policy makers acknowledging that the Bill of Rights committee would also address health and rights issues inclusive of PLHIV. ZNNFP+ was given an opportunity to be involved in the constitutional reform process and sensitize the Committee on the need to prioritise health and HIV in the new Constitution. The Malawian dialogue resulted in the involvement of MANET+ in the drafting and wording of the upcoming Malawi HIV and AIDS Bill. The Zambia dialogue resulted in talks about forming a taskforce which included the Ministry of health and civil society organisations to collaborate on HIV and TB issues and also encourage participation and involvement.

Next step: The dialogue series are continuing to be held across the region, as evidence mounts to their usefulness in not only catalysing their policy change but also effect necessary information sharing platforms between policy makers, PLHIV and program implementers.

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MOPE0982
Synergizing positive voices - the Pakistan experience
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Issues: People Living with HIV & AIDS, in Pakistan, lacked a concerted voice to influence decision making, at governmental, civil society and donor agency levels, about their very issues.

Description: Pakistan’s national “Association of People Living with HIV and AIDS” began work in late 2007, with the objective of playing the roles and well-being of PLHIV higher on the country’s agenda. In line with the GIPA principle, the Association, having an all HIV-positive Executive Board, ensures that PLHIV are consulted when decisions about prevention, treatment, care & support are taken at various policy and implementation levels. Key strategy components include advocacy and lobbying for PLHIV rights; increased access to care & support; seeking to increase social acceptance of PLHIV and enhancing the capacity of member CSOs.

Lessons learned: By providing an opportunity, positive energies of PLHIV can be harnessed together towards empowerment and achieving a mutual goal.

Next steps: Within a year, the newly established network has grown from an all-volunteer group of 10, to an 800 member Association of PLHIV with a strong potential to advocate and ensure their meaningful participation in decision making.

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MOPE0983
Success in youth-led advocacy: progress in supporting comprehensive, positive approaches to HIV prevention for young people in Ethiopia, Jamaica, Nigeria, and the United States

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Issues: While HIV prevalence rates in some countries are showing signs of stabilizing, the fact that young people still constitute almost half of all new HIV infections demonstrates that more needs to be done. Political will is still lacking to scale up evidence-based prevention programs for youth and to include young people in program and policy design, implementation, and evaluation.

Description: Advocates for Youth works in partnership with youth-led NGOs in Ethiopia, Jamaica, and Nigeria to support youth activist leadership councils in each country. These councils are comprised of eight to ten young people ages 18 to 24, dedicated to advocating for programs and policies that will improve youth sexual and reproductive health and rights (SRHR) nationally and internationally. Members of the councils in Ethiopia, Jamaica and Nigeria exchange strategies south-to-south and with a comparable council working to influence U.S. global HIV policy in the United States. All councils are further linked to other youth activists in low- and middle-income countries through the Intra-American Youth Advocacy Network and a youth activist website, amply.

Lessons learned: In Ethiopia, Jamaica, and Nigeria, the youth councils have succeeded in:
• Securing a commitment from the Minister of Health of Nigeria for a budgetary allocation for SRHR programs in the 2010 national budget;
• Securing the establishment of a National Youth Federation with committees with youth representatives seated under the Ethiopian Prime Minister;
• Establishment of a referral system on university campuses in Jamaica, launched by the Ministry of Education that expands access to reproductive health services for youth;
• Contributing to improvements in the President’s Emergency Plan for AIDS Relief.

Next steps: Advocates and its partners will continue to support the advocacy efforts of the councils through training, information sharing, and leveraging of new media within country, south-to-south, and globally.

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MOPE0984
Mobilising grassroots, social media, and lobbying support for youth in policy participation, implementation and increased budgetary spending for sexual and reproductive health and rights

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Issues: Nearly one third of Nigeria’s total population of 148.1 million is between the ages of 10 and 24. Lack of sexual health information and services makes young people vulnerable to sexually transmitted infections (STIs) and unintended pregnancy. Education as a Vaccine against AIDS (EVA), in collabora tion with Advocates for Youth (AYF), supports a national youth leadership council of young people, known as Youth Advocates Group (YAG) who employ community mobilization, online and social media, videography, coalition-building and advocacy as strategies to improve Nigeria’s ARSH policies.

Description: The YAG aims to achieve these objectives by advocating for:• A national budgetary allocation for youth ARSH policy implementation by 2009;
• Increased opportunities for young people to participate in the implementation of ARSH policies and programs; and
• The establishment of ARSH units at the state and local government levels. In addition, the council broadcasts campaign messages; produces policy materials; publishes a quarterly newsletter; posts blogs regularly on www.amphiyssvoice.org to create a media that specifically addresses the needs of ARSH in Nigeria and internationally.

Lessons learned: The council has made the following achievements that include, but are not limited to:
• The Health Ministers’ commitment to include a budgetary allocation for youth SRHR programs in the 2010 national budget;
• The creation of funding for ARSH in state budgets, particularly the FCT, as a means of advocating to the state administration;
• Participation in the study, review and dissemination on the national response to ARSH with the Ministry of Health.

Next steps: The council will continue to advocate for meaningful participation of young people in the policy and program decision-making process, in addition to securing and spending budgetary allocations specific to ARSH in the next fiscal year cycles.

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MOPE0985
Creating partnership for change and empowerment in Turkey - using the PLHIV stigma index as part of our organisational development

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Issues: Positive Living Association knows from the experiences of its members that starting from diagnosis, PLHIV in Turkey face stigmatized and discrimination from health care workers, workers, social environment, family, partners; they face human rights violations in every part of their life.

Description: We formed a partnership to implement the PLHIV Stigma Index. This has become part of a larger EU project addressing Human Rights, Advocacy and work with the Turkish parliament encompassing the Index, A Human Rights Violation Report, a Needs Assessment on overcoming barriers to providing health care to PLHIV in Turkey.Using the principles of the People Living with HIV Stigma Index we have developed a credible that has involved all actors able-to-counter a national youth in health policy. We are mobilising grassroots, social media, and videography, budget tracking and advocacy for ARSH.

Next steps: The Action plan developed, full roll out of the PLHIV Stigma Index is happening March - August 2010. The results will be shared with Turkish Parliament, Ministry of Health, related NGO’s and Media and will help our advocacy efforts in being. Initial outcomes of all this work will be presented at AIDS2010.

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MOPE0986
Ethiopian Youth Speak Out: mobilization, videography, budget tracking and advocacy for sexual and reproductive health and rights for a comprehensive approach to HIV prevention

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Issues: With over 65% of the population below the age 25, Ethiopia must invest in youth development and institutionalize youth leadership in policy decision-making processes relevant to adolescent reproductive and sexual health (ARSH). The Talent Youth Association (TaYA), a youth-led organization based in Addis Ababa, supports a national youth leadership council known as Ethiopian Youth Council for Higher Opportunities (ECHO), a group of passionate young people aged 18-24 who are proactively engaged in advancing the youth sexual reproductive health rights agenda through grassroots mobilization, online and social media, videography, coalition-building and advocacy.

Description: TaYA, in collaboration with Advocates for Youth, supports ECHO’s advocacy efforts to:
1) increase access to micro-contraceptives for young women between the ages of 15 and 29; and
2) institutionalize youth participation in the decision-making process of national policies, program implementation, and evaluation on ARSH.

Some activities include, but are not limited to:
• Publishing a monthly newspaper, DAHA, which is distributed to Ethiopia’s parliamentarians reading youth, particularly ARSH issues.
• Disseminating campaign materials at the Great Ethiopian Run to mobilize youth to join the advocacy campaign.

Lessons learned: The council’s advocacy efforts have contributed to the following efforts:
• Documented trend analysis on public expenditures on family planning/ reproductive health programs in Ethiopia.
• Establishment of National Youth Federation, seated under the Prime Minister, structured with development committee in health.
• Participation in a youth reception on ARSH, co-chaired by the Minister of Health and over 50 African Union Ambassadors.

Next steps: ECHO will continue to work towards ensuring meaningful participation of young people within partner organizations, decision-making bodies, and international conferences, as ensuring that federal appropriations are secured and spent for young people, inclusive of reproductive health programs integrated into HIV prevention programs as a comprehensive approach to ARSH.

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MOPE0987
The evolving trends in HIV/AIDS treatment activism in Sub-Saharan Africa

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Issues: How treatment activism has evolved in Africa from the era of demands for treatment to embracing new developments into the cause for treatment. Description: The efficacy of triple therapy in 1996 created demand for anti-retroviral therapy around the world. In Africa, treatment activism was championed by groups such as TAC, and initial demands were made on national governments to provide free treatment to people living with HIV/AIDS.
Treatment activism peaked from the 2000s after massive reductions in the prices of ARV drugs, and governments responded by rolling out national ART programs. The provision of ART by governments did not shut down the activist movement, but it forced Treatment activists to monitor the quality of health services and also got involved in clinical research programs in order to underline their support for the development of newer and safer drugs and therapies against HIV and AIDS. Other groups monitored the performance of mutual aid agencies such as PEFFAR, WHO and UNAIDS. Activists also get involved in drafting national policies, revised technical assistance in technical aspects such as supply chain management systems and other treatment and prevention processes. In the process of activism, treatment activists adapted themselves to the changing situation and learnt the new processes in order to be able to engage fully.

Lessons learned: Activism has not been static and was never built around one set of demands. Activists who championed the treatment cause were not embarking on a campaign to ensure availability of the drugs only, but were passionate about issues of drug safety and continued development of therapies against HIV and AIDS.

Next steps: There are novel developments in the treatment field, and activists need to keep abreast in order to ensure that treatment delivery is effective and adequate.

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MOPE0998
Development of the civil society and nomadic civilization: historic preconditions for the progress of NGO sector in the Kyrgyz Republic

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Kyrgyz Republic is Central Asian country with the most ancient history in the region. Kyrgyz people always used to be representatives of nomadic civilization and already in remote antiquity had their own state with full set of attributes. That is why they established preconditions for development of democracy and civil society. Nomadic lifestyle and severe climatic conditions require concentration of population in the direction of political and social superiority of council of representatives of society in decision-making on important issues, absence of gender-based discrimination and natural interest to innovative technologies, non-fundamental impact of Islam and the loss of its own writing system. The Kyrgyz Republic is Central Asian country with the most ancient history in the region.
Evidences-based policy development (including research as method of policy change)  
MOPE0993-MOPE1007

MOPE0993
Recommendations for HIV counseling and testing programs: updates for non-health-care settings

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Issues: The Centers for Disease Control and Prevention (CDC) is updating the 2001 Revised Guidelines for HIV Counseling, Testing, and Referral to address programs in non-health-care settings. These recommendations highlight procedures that should follow for finding HIV-infected persons and conducting primary prevention for persons at high-risk for HIV.

Description: CDC’s Revised Recommendations for HIV Counseling, Testing, and Linkage in Non-Health-care Settings use an evidence-based approach supplementing advances in the science published in peer-reviewed journals with observations from the field and expert opinion. Initiated in 2007, comprehensive systematic reviews were conducted on four topics: targeting and recruitment of patients; testing and linkage and referral. Where evidence was minimal, opinion was sought from subject matter experts including: federal employees; academicians; national partner organizations; and field staff from health departments, community-based organizations, and prevention training centers. A 2-day consultation was held with diverse stakeholders to review synthesized evidence from the systematic reviews. End-user and partner input was solicited through series of teleconferences and listening sessions at national conferences throughout the developmental and writing periods.

Lessons learned: Continued solicitation of input from varied stakeholders is imperative throughout the recommendation process. When the quality of evidence in public health reviews is limited, a comprehensive review of the literature is complemented by solicitations of “best practices” from the field.

Next steps: Reviews will be updated based on new evidence. A second consultation will address the quality of evidence and strength of recommendations in the draft document before vetting it through peer review and public comment processes. On some occasions when, with this review, public health practice requires recommendations but evidence for reviews is limited, expert opinion can be used. These recommendations serve as CDC policy for HIV testing in non-health-care settings and guide how CDC provides guidance and technical assistance to grantees.

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MOPE0994
Evidence-based policy making for women and girls: gender programming improves HIV outcomes

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Issues: Women now make up 50% of those living with HIV. A number of donors, including the Global Fund and PEPFAR, and some countries, have developed gender policies/strategies. With scarce resources and growing demand, program priorities must be based on effective interventions.

Description: OSI and PAF have compiled the evidence of HIV/AIDS interventions that work for women and girls. This document provides the evidence of the effectiveness of interventions for women and girls that can be used to guide program design and implementation. The evidence is organized under: 1: Evidence for HIV Prevention; 2: Evidence for HIV in Women and Girls, and 3: What Works to Support Women and Girls.

The analysis contains approximately 2,000 references from programs and studies from many low-income countries, with a focus on the fast-developing countries. This document contains research published in peer-reviewed publications with clear and transparent data on the effectiveness of various interventions. Where possible, the strength of the evidence is provided through use of the Gray Scale (1 = low; 5 = high).

Lessons Learned: Ample evidence exists that programming for women and girls, using gender-sensitive approaches, improves HIV/AIDS outcomes. Most science and biomedical research on HIV and AIDS interventions has been written for scientists; little has been written specifically for policymakers. It is critical to package and disseminate this evidence and to engage in ways that policymakers and program planners can use in designing programs and that donors can use in setting priorities for program funding.

Next steps: This evidence will be widely disseminated to country programs and donor organizations. The document will be updated on a regular basis, and stakeholders have access to timely information to design and implement programs that improve the HIV/AIDS outcomes of women and girls.

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MOPE0995
Should we take an AIDS exceptionalist approach towards AIDS-orphan carers? Evidence to guide policy and intervention design from the largest global study on AIDS-orphan carers

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Background: Fifteen million children have been orphaned by AIDS. Evidence increasingly suggests that their carers face substantial negative health impacts. The AIDS exceptionalism policy debate is directly relevant to design of interventions to lessen negative outcomes faced by carers. This paper uses evidence from the largest global study on carers of AIDS-orphaned children to inform this policy debate.

Methods: A cross-sectional survey of 1599 adult primary carers was conducted from August 2008 to February 2009 in Umhlanga, a South African town with 5.8 times the national IDP rate (41.6%). Random cluster sampling was used. Data from 30 clusters and 1248 carers were usable of 1599. Next of kin were predominantly female (57%). Carers had a median age of 39 years (sd=14). Carers had significantly worse general health and depression than non-orphan carers (p<0.01). When orphan carers were disaggregated into AIDS-orphan and other-orphan carers (i.e. carers of children orphaned through violence, etc.), AIDS-orphan carers had the highest prevalence of poor general health and depression (p<0.001) but other-orphan carers had the highest prevalence of post-traumatic stress (p<0.01). Analyses identified modifiable risk factors for health disparities including economic assets, access to social welfare grants, employment, and housing type.

Conclusions: Orphan carers experienced significantly worse health than non-orphan carers but patterns of health disparities less clear when orphan carers were disaggregated into AIDS-orphan and other-orphan carers. Evidence strongly suggested that an AIDS exceptionalist approach would miss an opportunity to address the health of other-orphan carers. Modifiable risk and protective factors were identified for future intervention testing.

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MOPE0996
Addressing the evolving HIV epidemic: HIV clinical practice guidelines

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Issues: Because HIV clinical care is a dynamic discipline, new scientific findings and information continuously arise that impact treatment recommenda-
tions. The evolving HIV care system requires prepared practitioners who in turn need practical decision support. As a public health agency responsible for HIV care in over 200 ambulatory clinics, the New York State Department of Health AIDS Institute (NYSDOH AI), in partnership with Johns Hopkins University, through its Guidelines Program reviews and synthesizes this newly identified information into clinical practice guidelines targeting frontline HIV providers. This unique program extends beyond the area of HIV manage-
ment and addresses mental health and substance use needs, prevention, as well as specific issues that affect women, adolescents and children with HIV infection.

Description: The program has recently produced HIV guidelines that address an expanded range of topics clinicians currently encounter in primary care practice, including acute HIV infection, transitional care for adolescents, preconception care, hepatitis C screening and management, IUDs, and the care of postmenopausal women. All guidelines are developed by expert panels of HIV practitioners. The rated recommendations in these guidelines, based upon scientific evidence and expert opinion, are a resource for immediate practical access, available online at www.hivguidelines.org.

Lessons learned: Frontline HIV providers continue to require access to a range of expertise in order to meet the care and treatment needs of patients with HIV. Maintaining an accessible and up-to-date website (www.hivguidelines.org) with comprehensive-implications of emerging scientific evidence provides a way to ensure that practitioners have the necessary information for the variety of clinical challenges they encounter, while also providing a platform for assuring the quality of HIV care.

Next steps: Emerging issues in the HIV epidemic will result in the need for new and updated guidelines for NYSDOH AI to continue to support frontline practitioners and ensure a uniform standard of care.

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20,000 drug users are incarcerated for drug related crimes. and it is less expensive than the incarceration. In Italy each year at least of them a job after their detoxification, this policy also reduces the incidence of Conclusions: In all three countries, low levels of drug related crimes, resources from justice and prison expenditures to rehabilitation and social reininsertion of drug addicts, proving as policies more oriented towards the contrast of consumption can be more effective than policies oriented solely towards the contrast of production and dealing.

Methods: In this work, we propose a scheme to understand the economic mechanisms that underlie the working of the drug market and the overlapping towards the contrast of production and dealing. and the overlapping mechanisms that underlie the working of the drug market and the consumption between legal and illegal markets. Based on this scheme, we then analyze the critical points of the current demand and supply-oriented policies to contrast the drug market and to reduce the harms and propose some insights to make them more effective from both a social and an economical perspective.

Results: Finally, we present a simulation concerning a reallocation of the resources from justice and prison expenditures to rehabilitation and social reininsertion of drug addicts, proving as policies more oriented towards the contrast of consumption can be more effective than policies oriented solely towards the contrast of production and dealing.

Conclusions: The number of problematic drug users can be reduced assuming them a job after their detoxification, this policy also reduces the incidence of Conclusions: In all three countries, low levels of drug related crimes, resources from justice and prison expenditures to rehabilitation and social reininsertion of drug addicts, proving as policies more oriented towards the contrast of consumption can be more effective than policies oriented solely towards the contrast of production and dealing.

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Conclusions: In all three countries, low levels of drug related crimes, resources from justice and prison expenditures to rehabilitation and social reininsertion of drug addicts, proving as policies more oriented towards the contrast of consumption can be more effective than policies oriented solely towards the contrast of production and dealing.

Methods: In this work, we propose a scheme to understand the economic mechanisms that underlie the working of the drug market and the overlapping towards the contrast of production and dealing. and the overlapping mechanisms that underlie the working of the drug market and the consumption between legal and illegal markets. Based on this scheme, we then analyze the critical points of the current demand and supply-oriented policies to contrast the drug market and to reduce the harms and propose some insights to make them more effective from both a social and an economical perspective.

Results: Finally, we present a simulation concerning a reallocation of the resources from justice and prison expenditures to rehabilitation and social reininsertion of drug addicts, proving as policies more oriented towards the contrast of consumption can be more effective than policies oriented solely towards the contrast of production and dealing.
MPOE1002
New policy for protecting children affected by AIDS and plan for a child welfare system
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Issues: As the HIV epidemic matures in China and adults become sick and die, more children become AIDS affected. However, excluding children under age 14 from local AIDS datasets and excluding an AIDS-related approach to children does not work, and many other vulnerable children have not been accounted for by the current system. Institutionalization is still often considered the dominant approach.

Description: UNICEF collaborates with the Government on high level advocacy and field pilot of community based care. In 2007, UNICEF supported the State Council AIDS Working Committee Office and the Ministry of Civil Affairs (MCA) on the International Seminar on Children Affected by AIDS, and subsequently jointly developed a policy brief.

In 2009, based primarily on experience of UNICEF pilot, the MCA issued the Draft Standard on Further Support of Children Affected by AIDS; making progress on extending benefits from double orphans to all children affected; shifting from once-off charity to stabilized welfare arrangement with cash assistance and basic social services provided by different government sectors; setting standards for orphans and vulnerable children for minimum assistance; government funding can go to the family and community, no longer exclusively to welfare institutions; provisions for social workers giving systematic support and oversight of family and community care via provincial and municipal guidance centers.

Lessons learned: UNICEF’s collaboration with the Government and partners contributed to protecting the rights of children affected by AIDS. The high profile of the issue and the opportunity to pilot community based care enabled UNICEF to work with various government agencies and citizens to address HIV as an entry point for a comprehensive child welfare system in China covering all vulnerable children.

Note: The UNICEF HIV, Social Policy and Child Protection experts are collaborating with the MCA on high level advocacy and community level piloting to work towards a comprehensive child welfare system in China.

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MPOE1003
Access to liver transplant surgery for Canadians living with HIV/AIDS: building a business case for access
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Background: Canadian PLWHAs increasingly need access to liver transplantation assessment and surgery. Approximately 58,000 Canadians are living with HIV/AIDS and 3.9 people per 1000 PLWHAs need access to a liver transplant assessment and/or a liver transplant. However, no province in Canada offers this service to PLWHAs. The Canadian Treatment Action Council (CTAC) is a PLHWA run treatment access non-governmental organization. CTAC sought to develop a business case for a dedicated liver transplant program in Ontario, Canada.

Methods: CTAC set up meetings with key ministries within the Ontario government to advocate for funding of a dedicated liver transplant program for PLWHAs. CTAC sought the support of a Toronto liver transplant surgeon who agreed to collaborate with CTAC on the project. At a meeting with a medical advisor to Ontario’s Premier, CTAC was advised to develop and write a Business Case for funding liver transplants for PLWHAs.

Results: CTAC developed a draft business case and submitted it to government officials. CTAC met with the Toronto General Hospital. Content included: HIV/AIDS epidemiology in Canada; clinical toxicities associated with HIV and antiretroviral therapies; access to surgery in surgical technology; literature review; guidelines from other countries; insurance costs against occupational exposure to the surgical team; cost-effectiveness of providing the service in Canada and opportunities for revenue generation for the province of Ontario. TheCTAC Business Case was a collaborative effort between the PLHWA community and the surgical and HIV medical communities and was an effective advocacy tool.

Conclusion: As a result of the Business Case and political meetings, the Toronto University Health Network has submitted a funding proposal for an HIV/AIDS liver transplant program.

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MPOE1004
Using research evidence to influence criminal law policy: contributions form a law reform project on HIV non-disclosure in Ontario, Canada
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Issues: We report on the process, challenges and results of a funded project that used research evidence to influence criminal law policy on HIV non-disclosure in the province of Ontario, Canada, the epicentre of criminal cases in the country. Canada has a long history of using criminal charges to respond to HIV non-disclosure. Our project is the first in the country to use research evidence in a law reform project centered on promoting the use of prosecutorial guid-

ance to restrict the ambit of criminal prosecutions for HIV non-disclosure.

Description: Our project involved two linked processes. First, we created and used various forms of research evidence (trend data on criminal cases, legal evaluation of case dispositions, social science evidence on the effects of criminalization, original interviews with people living with HIV) to build a case against the criminalization of HIV non-disclosure. Second, we used our research in a process of knowledge translation and exchange that engaged people living with HIV, public health professionals and members of the government as stakeholders in our findings.

Lessons learned: We explore the challenges of using research evidence to influence a controversial area of criminal law policy. We emphasize two key issues:

1) the difficulties associated with using complex and rapidly changing scientific data to inform an area of criminal law policy (the “significant risk” test for HIV disclosure);
2) the possibilities and limits of using aggregate data to inform debates about the demographic profile of criminal cases, especially as regards the race of defendants.

Next steps: A critical next step involves the use of our research to inform a public, province-wide campaign to encourage the Ministry to embark upon a process of producing prosecutorial guidelines.

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MPOE1005
Women with HIV/HCV co-infection in Canada: a review of research evidence related to treatment, care and support needs
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Issues: With the continued increase in the number of women affected by HIV/AIDS in Canada and approximately one quarter of Canadians co-infected with HIV and hepatitis C (HCV) there is a need to ensure the treatment, care and support needs of co-infected women with HIV and HCV are informed by high quality, locally applicable research evidence. To identify key findings from the available research evidence, we requested a literature review from The Ontario HIV Treatment Network (OHTN) Rapid Response Service, which searches for and synthesizes relevant systematic and primary literature for AIDS service organizations to help inform decision-making, service delivery and advocacy efforts.

Description: After searching for systematic reviews and primary literature using five databases (Cochrane Library, Database of Abstracts of Reviews of Effects, www.health-evidence.ca, Medline and CINHAL), minimal relevant research evidence was identified. 16 published studies related only to HIV/HCV co-infected women’s experiences of treatment and/or treatment considerations but not to care and support. Two of these studies were conducted in Canada. None of the studies addressed overall treatment needs and gaps for co-infected women nor did they explore issues facing women from diverse backgrounds.

Lessons learned: This review highlights the critical shortage of information about best practices for care, treatment and support for HIV/HCV co-infected women in Canada, underscoring the need to build a new program of research.

Next steps: Our goal is to conduct community-based research to provide evidence for the 1st Canadian HIV/HBV/HCV Co-Infection Research Summit in 2010. Partnerships with the Canadian Treatment Action Council, Voices of Positive Women and the OHTN are being developed for these research needs. Initiatives should focus on gaps in treatment, care and support for HIV/HCV co-infected women including gender-based research which could assist in health and social policy reform regarding the treatment, care and support of people living with HIV co-infection.

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MPOE1006
Towards the 1st Canadian HIV and HBV/HCV co-infection research summit: the Canadian Treatment Action Council (CTAC)
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Issues: With the continued increase in the number of women affected by HIV/AIDS in Canada and approximately one quarter of Canadians co-infected with HIV and hepatitis C (HCV) there is a need to ensure the treatment, care and support needs of co-infected women with HIV and HCV are informed by high quality, locally applicable research evidence. To identify key findings from the available research evidence, we requested a literature review from The Ontario HIV Treatment Network (OHTN) Rapid Response Service, which searches for and synthesizes relevant systematic and primary literature for AIDS service organizations to help inform decision-making, service delivery and advocacy efforts.

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Multi-sectoral policy development (including collaboration in advocacy across movements or sectors)  MOPE1008-MOPE1020

MOPE1007
Tossed on a sea of indicators: navigating health systems strengthening to achieve measurable outcomes
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Issues: Policy makers are currently focusing on strengthening health systems in order to improve the sustainability of the programs. WHO, World Bank, and many others have developed indicators and are gathering data to assess the health systems. However, gathering data is not enough unless we can answer key questions such as—What health systems improvements will have the biggest impact for improving HIV/AIDS service delivery? Description: Vietnam’s Health Strategy and Policy Institute (HSPI) conducted a provincial health system assessments, with support from USAID’s Health Systems 2020 project. Using an innovative non-parametric indicator scoring matrix, each indicator scored from 1-3, one being “not adequate” and three being “highly adequate”. Indicators scoring less than adequate (below 1.5) were flagged and used to guide local stakeholders, policy-makers and international donors to prioritize and target their interventions.

Next steps: HSPI is critical to supporting HIV/AIDS prevention and service delivery. Local and donor interventions are currently underway to target the priority areas of HIS weakness identified by the Health System Assessment and Indicator prioritization process. Additional variations of health system assessments scoring and prioritization are currently being tested in Lesotho and Zimbabwe.

Lessons learned: Local organizations prioritize according to perceived local needs. Addressing local priorities is more likely to have local support and thereby achieve more significant and lasting impacts. Engaging the Vietnam Ministry of Health’s designated health policy research group to conduct the health systems assessment and prioritize results, allowed the results to feed directly into the policy making process.

MOPE1010
Building an enabling policy environment for HIV prevention and control in Yunnan province, China
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Background: Yunnan was one of the earliest HIV-affected provinces in China. In 2005, the Provincial government launched its first three-year “people’s war” aimed at preventing and controlling HIV and drugs and this was followed in 2008 by the second three year “people’s war.” As part of this process the government acknowledged that in order to combat the HIV epidemic a multi-sectoral long term strategic policy framework was required to inform the province’s approach to HIV prevention and control. In response to this call for action, the government, with technical support from USAID/Health Policy Initiative, Greater Mekong Region and China, developed a “Long Term Working Mechanism” (LTWM) for HIV prevention and control. This has become the policy framework in which the province’s response to HIV is embedded.

Methods: An extensive desk review of policies, laws and regulations and work plans was undertaken and 192 stakeholder interviews were conducted. The result was the drafting of a LTWM/strategic plan that outlined the government’s plan of action.

Results: The LTWM is contains the following commitments:

• Improving the quality of information for informed decision making
• Plugging policy gaps, resolve policy inconsistencies and implement policies
• Strengthen the coordination, supervision, and monitoring functions of the Provincial AIDS Bureau, Working Committees and Offices
• Main staff and improve personnel management practices
• Harmonize HIV Plans and integrate HIV prevention into socioeconomic plans
• Sustainable, and improve user efficiency of the funding base
• Promote civil sector involvement

Implement monitoring, and evaluation

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Lessons learned: By responding to common risk factors and barriers, cross- 
mandate collaboration on a national scale can reinforce prevention efforts, 
effectively address the root causes of disease and reduce the impact (i.e. 
homelessness, poverty) on other policy areas. Targeted surveillance studies 
can provide additional context to understand the behaviours, factors and con-
ditions that affect risk of HIV infection which is used to inform public health 
policy. An all-of-government approach to address the DoH would improve fed-
eral government efficiency, cost-effectiveness and health outcomes for Ca-
nadians.

Next steps: Strengthen PHAC leadership across federal departments to 
collaborate on issues of common interest and address the DoH.

MOPE1014 Challenges and achievements on health in prisons: coordinated actions in response to HIV/AIDS and co-infections

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Issues: A total of 471,498 people live under the custody of the Brazilian Penitentiary System. The Ministries of Justice and Health established in 2003 the National Policy for Health in the Penitentiary System in order to organize the access of inmates to public health services. The policy implementation relies on coordination and networking to be effective, a major challenge for various involved actors. Given the confining and overcrowding conditions of prison settings, the prison population is exposed to health risks factors such as HIV/AIDS and co-infections.

Description: The Brazilian policy for health in prisons has been supported by intersectoral actions aimed at joining political and technical efforts from various programmatic areas of the Ministry of Health, Health in Prison Coord-

ation, HIV/AIDS, Viral Hepatitis, TB; the National Penitentiary Authority; 
UNODC; MSH MAHOWHO. A major result of the integrated efforts was the Brazilian Consultation on HIV/AIDS in the Penitentiary System. Among the consultation outcomes there were the identification of gaps on the policy implementation, the establish-
ment of recommendations and the consensus of the need to strengthen in-
tersectoral mechanisms.

Lessons learned: To improve real conditions of health in prisons throughout 
the country it is necessary to develop consistent integrated approach among 
three government levels, civil society and international organizations. The 
consultation was an opportunity to identify best practices, detect challenges 
and gaps and enlighten next steps.

Next steps: A training project for health professionals and prison officers is 
expected to be implemented in 2010; the National Policy is under revision; 
a joint proposal for the 10th Global Fund on TB and HIV control in prison set-
tings is being developed; an assessment of health teams working in prisons 
will be carried out.

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Development of intra-sector and inter-state secretaries actions as a strategy for reducing vulnerability to STD/AIDS among gay men, men who have sex with men and transvestites: the experience of the State of Sao Paulo, Brazil

MOPE1015

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Introduction: The São Paulo State Program for STD / AIDS has implemented a state plan to combat AIDS and STDs among gay men, men who have sex with men (MHSV) and transvestites. The plan aims to contribute to the reduction of exploitation, both through promotion, prevention and comprehensive health care policies. It consists of five goals divided in targets to be achieved by the end of the year 2012. The plan also includes inter-sectoral actions for reducing vulnerability to STD / HIV / AIDS experienced by gay men, (MHSV), and transvestites. Description: In 2009 several actions have been carried out: 1) StPSHPA (State Program for STD / AIDS, Program for Humanization) - both of the State Department of Health - and the Coordination for Policies for Sexual Diversity of the Secretariat of Justice and Defense of Citizenship; 2) Two workshops to health professionals and employees of state hospitals, The first one involved 50 participants coming from the metropolitan region of São Paulo and the second 60 participants from other regions of the state. Lessons learned: Participants lack of information about sexual diversity and gender identity was observed but awareness of this issue was increased. Participation of lesbians, gays, transvestites and transsexuals talking about their experiences was crucial as participants approached the everyday discrimination, violence and exclusion this group is subjected. A construction of an Action Plan by the institutions attending the workshops was proposed as an attempt to ensure institutional commitment.

Next steps: In 2010 meetings with these two sensorized groups will take place for monitoring the development of the Plan. A second training is also planned. Other actions involving different Government Departments such as Labor, Social End Social Services will be held.

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Model of multi-sectoral collaboration in prevention of violence against HIV-positive women

MOPE1016

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Issues: 42,268 cases of HIV are officially registered in St. Petersburg, Russia; more than 30% of them are women. HIV-positive women are vulnerable sample to violence, including domestic violence. Reducing of violence and discrimination against HIV-positive women requires joint efforts from social and medical service providers and from police.

Description: In 2008-2010 organization “Doctors to Children” implemented project aimed at reducing discrimination and violence against HIV-positive women in St. Petersburg, Russia. One of the districts of St. Petersburg was chosen to develop and test the model of multi-sectoral collaboration on preventing violence against HIV-positive women and providing assistance to HIV-positive women exposed to violence. The sociological survey conducted at the project start-up showed that 49% of HIV-positive women, versus 18% of women not affected by HIV, were exposed to domestic violence. It also showed low awareness among HIV-positive women of existing services, lack of knowledge on HIV and domestic violence among professionals, and unwillingness of physicians and police to collaborate with social protection services to provide comprehensive assistance to HIV-positive women exposed to violence. Further project activities included: a) Trainings for professionals (totally, 137 physicians, policemen, social workers, and psychologists from governmental services and NGOs were trained); b) Development and testing of the Protocol of Multi-sectoral collaboration on preventing violence against HIV-positive women and providing assistance to women exposed to violence (the protocol describing procedures of interactions between policemen, health and social service providers has been developed); c) Providing comprehensive services to HIV-positive women exposed to violence (over 60 HIV-positive women received services during the project).

Lessons learned: It was crucial for the project success to establish strong partnership between local authorities, governmental service providers and NGO.

Next steps: Distribution of the developed Protocol in all city districts and other regions of Russia.

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The HIV prevention campaign “Post Offices Fighting Against AIDS” in Brazil

MOPE1017

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Issues: For the first time in Brazil, Post Offices have joined HIV prevention efforts.

Description: Brazil is one of the seven pilot-countries the Global Campaign “Post Offices Fighting Against AIDS”, an initiative launched in 2009 by UN-AIDS, IPU, ILO and UNI Global Union, which intends to mobilize the unrivaled physical network of 600,000 post offices around the world for HIV prevention.

In Brazil, the National Post Offices, the Ministry of Communications, UNAIDS, the Ministry of Health, ILO and FENTECT join the campaign. The goal is for the more than 12,000 Brazilian post offices to become strategic spaces for the distribution of HIV prevention material.

The campaign material and messages were adapted to local needs and specificities, making use of the Brazilian experiences in the area of HIV/Prevention: IEC campaigns have sought to provide clear and direct messages about transmission routes, including the use of condoms as first choice prevention method for the sexually active population.

The Brazilian proposal goes beyond the international initiative by delivering a specific letter with HIV prevention messages to all households in Brazil (Federal District and selected municipalities of Bahia and Amazonas). However, the plan is to reach all households until 2011. Besides, a website was developed containing campaign materials available for download, amongst others (www.correioscontraaids.org.br).

Lessons learned: Due to their nationwide network, National Post Offices are strategic partners for the dissemination of HIV prevention messages: for the first time Brazil has a physical access to all households. Moreover, the campaign will mobilize post offices employees as multipliers of preventive information.

In addition, the experience proved that global campaigns can be a powerful instrument, but methods and materials must be adapted to the specific country situations.

Next steps: Distribution of HIV prevention messages have started in three preliminary regions: the Federal District, Bahia and Amazonas.

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Plan to combat the AIDS epidemic and to control sexually transmitted diseases among gay men, transvestites and other men who have sex with men (MWSM) in the state of Sao Paulo, Brazil: a government strategy to reduce vulnerability to infection among priority groups

MOPE1018

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Issues: The Brazilian health information system indicates that although the AIDS epidemic has changed its profile over the years, the number of cases and incidence rates among gay and other MWSM is still very high. These findings reinforce the importance of formulating public health policies aimed at reducing the vulnerability of these populations.

Description: The São Paulo State Program for STD/AIDS established in 2008, the state plan to combat the AIDS epidemic and to control sexually transmitted diseases among gay, other MWSM and, transvestites, which aims for the period from 2009 to 2012 to reduce their vulnerability, through policies of promotion, prevention and health care.

The Plan was developed in a participatory manner through workshops involving health professionals, representatives of other public institutions and members of NGOs.

Lessons learned: The process enabled the articulation with new governmental institutions that are important for achieving the goals such as the Department of Justice and Defense of Citizenship, Culture, Education and Labor. The inclusion of other health areas such as the Program on Viral Hepatitis, Adolescent and Mental Health was fundamental. And the involvement of organized movements provided social control.

Next steps: Goals such as the disclosure of the Plan and articulation with other state secretaries have already been achieved. Numerous actions such as training, production of educational materials, distribution of condoms and gel lubricant and the creation of a Comprehensive Health Clinic for Transgenders and Sex Workers (CCT) are being developed. In 2010 a media campaign focused on combating homophobia and vaccination against hepatitis B in this population will be held.

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MOPE1019
Access to liver transplant surgery for Canadians living with HIV/AIDS: a multidisciplinary solid organ transplant (SOT) advocacy working group
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Background: Canadian PLHIV/AIDS increasingly need access to liver trans-plantation assessment and surgery. Approximately 58,000 Canadians are liv-ing with HIV/AIDS and 3.9 people per 1000 PLHIV/AIDS need access to a liver transplant assessment and/or a liver transplant. However, no province in Canada offers this service to PLHIV/AIDS.
Methodology: The Canadian Treatment Action Council (CTAC) is a GIPA run access to treatment non-governmental organization for PLHIV/AIDS and people co-infected with Hepatitis. CTAC established a multidisciplinary Solid Organ Transplant (SOT) Working Group to further advocacy efforts to secure a dedicated HIV/AIDS liver transplant program. CTAC sought input from per-sons living with HIV/AIDS, Hemophilia, Hepatitis co-infection, infectious dis-ease specialists, liver transplant surgeons, community HIV/AIDS physicians and legal experts in the area of Charter Rights and class action law to provide advisory support to this CTAC initiative.
Results: Bringing together a multidisciplinary group of experts to assist with access to securing liver transplant surgery allowed for a more effective advo-cacy effort. CTAC worked with stronger arguments at both the political and medical community levels. This group demonstrated the value of the HIV/AIDS community in collaborating with medical and legal experts to move HIV/AIDS advocacy efforts forward, resulting in the Toronto University Health Network submitting a funding request for a dedicated HIV/AIDS liver transplant program.
Conclusion: Community advocacy efforts can be augmented by seeking part-partnerships and working opportunities with a variety of experts. Support from experts strengthens advocacy efforts. Working collaboratively with a multi-disciplinary team adds weight when lobbying governments and other decision makers within the medical community for health and social policy change.
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MOPE1020
Universal access for women and girls now! A UNDP-led UNAIDS and UNIFEM interagency project
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Issues: Knowledge about the impact of HIV on women and girls has not been matched with sufficient rights-based and evidence informed programming to meet their needs. The 2010 and 2015 deadlines set by world leaders to meet universal access targets and Millennium Development Goals constitute op-portunities to reflect on lessons generated from interventions to accelerate universal access for women and girls, and to intensify global advocacy and action to achieve these targets.
Description: UNAIDS and UNIFEM support women and girls. Currently being implemented in Ethiopia, India, Kenya, Malawi, Madagascar, Namibia, Rwanda, Swaziland and Tanzania, UNAIDS and UNIFEM work together to address gender barriers that prevent women from accessing services, and to support women as they engage in the work of health and development. They focus on: women living with HIV and other, multiple stakeholders; and synergizing with relevant national, regional and international HIV, gender, development, hu-man rights and public health policies and programs.
Lessons learned: Gender-driven, multi-stakeholder programming ensures buy-in at multiple levels. Linking projects in on-going national processes and strategies ensures better impact and sustainability.
Next steps: UNAIDS and UNIFEM are working in 13 countries and 20 provinces in the region. In the medium to long term, the project will continue.
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MOPE1021
Ideology, evidence, and policy development: a discursive policy analysis of the United States’ ABC policy for international HIV prevention
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Background: During the Bush administration, PEPFAR faced criticism over its HIV prevention strategy known as ABC (standing for Abstain, Be faithful, or use Condoms). PEPFAR argued its approach to be ‘evidence-based’, and learned from Uganda, while opponents claimed it was ideologically driven, drawing competing conclusions about the implications of Uganda’s experi-ence. The debates raise questions of how the same epidemiological and histor-ical evidence can be used to support or challenge different interpretations of com-peting ideologies in developing HIV policy recommendations.
Methods: A case study investigating PEPFAR’s ABC policy from a critical pol-icy analysis lens. Qualitative discourse-oriented analysis was conducted with textual data (policy documents, meeting minutes, reports, internal agency publications) and key-informant interviews of 27 individuals in Uganda and the US. Thematic analysis was conducted with the NVIVO qualitative software package.
Results: Underlying ideologies were found to frame both the understanding of evidence, and the subsequent construction of prevention recommenda-tions. In particular, two competing core belief systems—a ‘moral absolutist’ position promoting a correct set of behaviours, and a ‘freedom prismatic’ position emphasizing individual choice—were found to explain much of the differences in how ABC was understood, and the ways evidence was used in policy discourse. On both sides, interpretations of ABC were internally consistent with belief structures were held to be ‘evidence-based’, even when they came to different conclusions from the same evidence.
Conclusions: Evidence, particularly around complicated issues such as be-haviour change, does not speak for itself in policy terms. In this case, under-lying belief systems and ideologies provided the frames through which actors understood and subsequently used that evidence to develop policy recommendations. Using such a cognitive-political model can help to explain the roles of ideology in policy debates, illustrating that it not only influences preferred policy outcomes, but may also shape the understanding of scientific evidence itself.
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MOPE1022
Art and health in the prevention of HIV/AIDS
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Issues: This report describes the experience that has been held since De-cember 2007, the Department of State Program for Prevention of STD / AIDS in Sao Paulo. Starting from the principles of interdisciplinarity and transdis-ciplinarity, we show how it is being built into a social network that identifies and develops strategies that use various artistic languages to prevent HIV / AIDS.
Description: Our working group has been meeting monthly, involving the following social actors including the municipal STD / AIDS State of Sao Paulo, non-governmental organizations, independent artists, professional or ama-teur. The main objectives are: improve knowledge and strategies that guide practices and programs of art and health in the state of Sao Paulo, the focus of prevention of HIV / AIDS, promote joint health services, practitioners of art and other government sectors such as education and culture.
Lessons learned: The communication of the artistic object is given by channels such as emotion, amazed, intuition, associations, evocations (Coli, 2006). Notice that communication is possible in personal or public, daily. We’ve realized on those working years, the increasing support of the municipal STD / AIDS in our project. In 2009 we conducted an Artistic Pro gram at the First Paulista Meeting Prevention, involving 200 participants and several types of art: photography, music, theater, visual arts. This program was carried out by artists, NGOs and health professionals. Thus we can see the growing interest in this strategy. Art can participate in the work of health care: facilitating a conversation, opening new channels of dialogue, commu-nicating and educating, without losing the status of art.
Next steps: Continuity of the group to implement the interface art and Health, identifying existing opportunities and creating new alternatives for work in preventing HIV / AIDS. Hold in 2011 a meeting Paulista of Art, Health and Prevention.
Presenting author email: dreyf@crt.saude.sp.gov.br
The use and influence of international bodies in policy development and change: MOPE1023

MOPE1023
Amazon aids - a UN integrated plan in support to the HIV response in the Amazon region of Brazil

A. Benzaken Schwarzb, B. Smulid, J. Cortes, C. Pedro

TUAM and SBDES/AM, Manaus, Brazil; SEP LAN/AM, Manaus, Brazil; UNAIDS, Brasilia, Brazil

Issues: Based on the national priorities established by the Brazilian federal government in 2007, the UNAIDS Theme Group on HIV (an expanded multi-sectoral body established by UNAIDS in some countries to advise the UN System on HIV issues) has been successful in collaborating with the regional authorities to support the implementation of the Amazon region’s HIV/AIDS response. The Amazon region faces unique challenges due to its vast size, diverse indigenous populations, and remote areas. The UNAIDS Theme Group has been instrumental in promoting joint programming and funding, as well as in fostering partnerships between local governments and civil society organizations.

Next steps: The UNAIDS Theme Group is working to strengthen the capacities of local and national governments to respond to the HIV epidemic. This includes promoting joint UN programming on HIV in order to have more funded, coordinated, and targeted actions. The Group is also focusing on the need of promoting joint UN programming on HIV in order to have more funded, coordinated, and targeted actions. The Group is also focusing on the need of promoting joint UN programming on HIV in order to have more funded, coordinated, and targeted actions.

Methods: Conference calls and focus groups (n=129) were convened with People Living with HIV/AIDS (PLHA) to educate, strengthen, and support them in their work. The focus groups were conducted in different areas of the Amazon region to ensure a wide range of perspectives. Recommendations were used to drive the work of local and national governments, as well as to inform the UNAIDS Theme Group’s work.

Conclusions: The process used by the New York State Department of Health AIDS Institute to engage PLHA in HIV/HIV policy deliberations is a model for other jurisdictions to use, not only locally, but internationally. A model for other jurisdictions to use, not only locally, but internationally. Consumer input plays a pivotal role in the development of policies and consumer-friendly education materials. Consumer input plays a pivotal role in the development of policies and consumer-friendly education materials. Presenting author email: cortes@unaids.org

Community participation as a best practice tool for policy development: MOPE1024-MOPE1033

MOPE1024
Feasibility of NGO-hospital cooperation in controlling MSM-driven HIV epidemics

H. Van

Nanjing Provincial Center for Diseases Control and Prevention, The Sector of HIV/AIDS/STD Prevention and Control, Nanjing, China

Issues: As one of the program cities of the China-Gates Foundation Cooperation Program for Prevention and Control, Nanjing has approximately 75% of HIV cases that have been undetected. 37% of AIDS patients died of AIDS-related diseases in 2007, according to baseline surveys and data, and HIV prevalence among MSM increased rapidly from 0% to 5.3% from 2005 to 2009.

Next steps: The consultative process was improved ART Guidelines, informed by the lived experiences of people living with HIV and the consultative process was improved ART Guidelines, informed by the lived experiences of people living with HIV. The consultative process highlighted:

- The possibility to identify regional, population-based and general recommendations.
- An example of the latter was that all consultations requested WHO to recommend earlier treatment with more choice of better-tolerated drugs on the grounds of cost-effectiveness and improved quality of life. The outcome of the consultative process was improved ART Guidelines, informed by the lived experiences of people living with HIV.

Methods: Conference calls and focus groups (n=129) were convened with people living with HIV and the consultative process was improved in treatment from programmes, including what was acceptable to include in the ART Guidelines.

Conclusions: The process used by the New York State Department of Health AIDS Institute to engage PLHA in HIV/HIV policy deliberations is a model for other jurisdictions to use, not only locally, but internationally. Consumer input plays a pivotal role in the development of policies and consumer-friendly education materials. Consumer input plays a pivotal role in the development of policies and consumer-friendly education materials. Presenting author email: cmallouris@gnpplus.net

Health information technology and information exchange: a model for engaging people living with HIV/AIDS in policy development to ensure privacy and security of electronic medical records

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‘New York State Department of Health, AIDS Institute, Albany, United States, New York State Department of Health, Albany, United States, New York State Department of Health, AIDS Institute, Albany, United States, New York State Department of Health, AIDS Institute, New York, United States

Issues: The potential for widespread adoption of Health Information Technology and Information Exchange (HIT/HIE) offers great opportunities for the future. Consumers of health care need education about the benefits, risks, and challenges of HIT/HIE and should be included in policy development to engender trust and buy-in.

Methods: Conference calls and focus groups (n=129) were convened with People Living with HIV/AIDS (PLHA) to educate, respond to questions, obtain input regarding benefits and concerns from frequent users of health care systems who have concerns about confidentiality, and to offer recommendations that will influence policies governing HIT/HIE.

Results: PLHA recommendations addressed consumer education, confidentiality and legal protections, written informed patient consent for sharing Electronic Medical Records (EMR) among providers, EMR security, access to sensitive health information by providers, and health information by providers, and health information by providers, and health information by providers. Results were conveyed to policy makers and contributed to the development of policies and consumer education materials.

98% of PLHA consulted believe the benefits outweigh the risks if policies and penalties are in place to address privacy, security, and confidentiality including strong laws governing HIT/HIE. Approximately 5% of PLHA are not comfortable with the concept of HIT/HIE due to distrust of government, computerized systems, and regarding fear how information will be used.

Conclusions: The process used by the New York State Department of Health AIDS Institute to engage PLHA in HIV/HIV policy deliberations is a model for other jurisdictions to use at the local, state, and international level. Consumer input plays a pivotal role in the development of policies and consumer-friendly education materials. Presenting author email: hcc01@health.state.ny.us

Driving change through consultation: PLHA recommendations during the WHO ART Guidelines revision process

C. Mallouris, G. Caswell, A. Doupe, R. Fransen, G. Ndlovu, S. Zaidi

1Global Network of People Living with HIV, Amsterdam, Netherlands, 2World Health Organization, Geneva, Switzerland, 3Young Positives, Amsterdam, Netherlands, 4International Community of Women Living with HIV, Mbabane, Swaziland, 5International Treatment Preparedness Coalition, Bangkok, Thailand

Issues: The 2009 World Health Organization’s (WHO) Recommendations for Antiretroviral Therapy for HIV Infection in Adults and Adolescents (ART Guidelines) marked the start of a new consultation process between WHO and people living with HIV. The aim was to understand what people living with HIV want from treatment programmes, including what was acceptable to include in the ART Guidelines.

Methods: Four international networks (GNP+, ICW, ITPC and Young Positives) undertook consultations with people living with HIV, using different approaches. These included two regional meetings alongside IAS 2009 in South Africa (30 people from 13 countries) and ICAAP 2009 in Indonesia (23 people from 6 countries), an e-consultation (66 people from 36 countries), three focus group discussions among women in Botswana (15), Namibia (15) and Swaziland (13), and a 30-question survey completed by 417 people from 42 countries.

Lessons learned: The consultative process highlighted:

- The different strategies which networks are using to engage with their constituents for global processes; and
- The possibility to identify regional, population-based and general recommendations.

An example of the latter was that all consultations requested WHO to recommend earlier treatment with more choice of better-tolerated drugs on the grounds of cost-effectiveness and improved quality of life. The outcome of the consultative process was improved ART Guidelines, informed by the lived experiences of people living with HIV.

Next steps: Networks are continuously improving their ability to reach and engage people living with HIV in processes that directly impact their lives. This consultative approach will be further refined and replicated for future WHO guideline development and other processes. Presenting author email: cma@gnpplus.net
MOPE1027
Community involvement in the CCMs of the Global Fund in ten countries have proven to be not meaningful as some barriers impede their effective engagement in policy development at the country level

A. Njugun, IRFD (Cameroon), India HIV/AIDS Alliance (India), Caribbean Vulnerable Communities Coalition (Jamaica), Romanian Harm Reduction Network (Romania), HEPS (Uganda), and Individual Activists in Countries The International Treatment Preparedness Coalition, HIV/AIDS Treatment, Bangkok, Thailand

Background: This study focuses on civil society(CS) engagement on CCMs of the Global Fund to determine in 10 counties successes and challenges in terms of effective CS engagement. CS engagement is integral to CCM model and has made important contributions on CCMs, but its engagement is seri-

ously limited by several factors

Methods: Community researchers used a standardized research template to interview 15-25 key informants (KIs), including current and former CCM members: representatives of government and international and bilateral agencies; grant recipients: CS reps and members of academia, business and medical organizations. Later they implement advocacy plans to pursue recom-

mendations provided by the study.

Results: Research findings were distinct in each country but major themes are recurrent: a) limited influence of CS in proposal preparation, shaping program implementation and oversight as CS is not considered equals by other members of CCM, not having appropriate knowledge and expertise, be-

ing reluctant to change leadership; b) all CCM members in these countries representing their own organizational priorities instead of broader CS sectors; c) a lack of support and motivation for CS to contribute with broader CS constituencies; d) lack of knowledge and expertise undermines the confidence and authority of CS reps on many CCMs; e) conflicts of interest for CS reps in which CS reps’ agency receives funds from the GF-supported programme; f) lack of reps from vulnerable communities.

Conclusions: Specific demands have been made to the GF at all level to invest in capacity, ensure performance monitoring, issue guidance on roles of CCM members, promote accountability, support independent CCM secretariats and voice strong support for participation of all stakeholders—not just those government representatives. This presentation will discuss the experimen-

tal challenges and how they overcome—including specifics on how the team pursue their follow up advocacy in different settings to improve their CCM performance.

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MOPE1029
Indonesian UNGASS forum: uniting civil society voices to push transparency and accountability from government

A. Wardhana
Indonesian UNGASS Forum, Coordinator,سلمان, Indonesia

Background: HIV and AIDS epidemic in Indonesia already middle in a new phase where there is a consideration that AIDS problem was more complex than just health issue. This problem could only be addressed if there are active participation from key affected population and other civil society in gen-

eral. Effort to significantly involve civil society organization into policy-mak-

ing process already done by the government, however unfortunately there are not many progress being made since civil society groups are fragmented, uncoordinated & lack of capacity. Considering the large amount of network and organization that have working on AIDS issues, right now Indonesia has five national networks of key affected population and more than 1000 AIDS organization spread on 33 provinces in Indonesia, there is a need to build a platform that would allow civil society’s voice to be significantly heard and stood equally with the government.

Method: Indonesia UNGASS Forum initiated a discussion among civil society in Indonesia to monitoring UNGASS AIDS goals in sexual reproductive and health through national workshops, electronic mailing list discussion and develop systemic advocacy effort to bring civil society voices. We also support a member by giving them a technical assistance on management system and advocacy effort.

Result: There are 5 national key-affected populations and 13 NGOs had joined the forum. We lead National Composite Policy Index (NCPI) Part B as one of UNGASS indicator. We joined the core writer team of national strategic plan on AIDS 2010-2014. Joint advocacy effort had been done on drugs law and health law.

Conclusion: Civil society could become equally on position with government if partnership is established. National platform for civil society partnership en-

able civil society to endorse transparency, accountability & sustainability. Presenting author email: ungass.indonesia@gmail.com

MOPE1030
We’re sorry to announce Act Up-Paris’ 20th anniversary - how to celebrate the anniversary of an activist group

S. Vambre
Act Up-Paris, Paris, France

Issues: In 2009, Act Up-Paris, the activist organization, turned 20. This an-

niversary could have been a moment of celebration. But no matter how impor-

tant this is, a commemoration requires time, energy, and financing. When an organization has in context from activist activities and from its most fundamental goals. In a context of political reaction highly detrimental to PƯA and to minorities as a whole, we decided to turn this celebration into an activist campaign.

Description: The presentation will highlight the strategy we choose to turn this celebration into a campaign:

- Choosing a slogan that turns celebration into a moment of anger: “We’re Sorry to Announce Act Up-Paris’ 20th Anniversary”
- A specific work of communication that ties the group’s previous successes, the current reactionary politics of the administration, and our claims for the future.
- A close connection between the communication on the anniversary and that about the actions of the moment, in order to give more weight to the lat-

er. In particular, the 20th anniversary was for us an occasion to convince the President of the French Republic in our headquarters to make our current claims more visible.
- A series of events that tie closely activism and festive activities: exhibits in public places that permit outreach and empowerment - art events - artistic performances articulated around our claims and rights; Participation in a gay pride parade focused on the anniversary; Special issue in our journal, short movies representing women with HIV; participation in numerous col-

oquium and conferences.

Lessons learned: The media impact of this campaign was very high. It proves that a celebration can be used to carry out very pressing topics and rights.

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MOPE1031
Eliciting experiential knowledge and facilitating civil society participation - experiences in collaborative knowledge building from the Solution Exchange AIDS Community

M.K. Nabert
Solution Exchange AIDS Community, New Delhi, India

Issues: The Solution Exchange AIDS Community is a group of professionals from a wide range of organisations and perspectives. They are dedicated to addressing challenges to achieving National AIDS Control Programme objectives for treatment and care of persons living with HIV, and preventing the spread of new infections. It harnesses the power of Communities of Practice (CoPs) to help attain national goals and Millennium Development Goals (MDGs), by leveraging the knowledge, experience and commitment of its members towards the common objectives in the AIDS plus MDG’s agenda.

Description: The Membership profile of AIDS Community includes PLHIV, People from Government agencies, NGOs, CBOs, Public and private sector health professionals, Social services providers, Researchers, scientists and academics. Members of Solution Exchange community are added to a moder-
Data base formulation in development strategy
map for local government’s HIV prevention plan and actions

S. Sakhunthaksin1,2
1Policy Research and Development Institute Foundation, Nonthaburi, Thailand, 2Mahidol University, Nakornpathom, Thailand

Issues: To shift the focus of HIV/AIDS related activities of the local governments in Thailand from just simple education and financial support of the people living with HIV/AIDS to the structural intervention for prevention in youths.

Description: Under the Global Fund, the integration of the preventive strategies into the governance system of each local government and health services in the area had been designed. The data-base for collection the risk behaviors of youths who were the target. Then, they participated in develop the strategy map for prevention which was ground for formulation of their 3years plan.

Lessons learned: They realized that the strategic information was not only supported the development of the effective structural intervention but also assisted them to analyze existing human and monetary resources as well as partner agencies’ youth policies. Results obtained during the strategic database formulation (SDF) had helped mobilized all partner agencies of each locale to work together to develop the Local HIV Prevention Strategy Maps (LHPSM) in more resolute manner. These LHPSM were also able to change the typical way of the planning development from factual and agency oriented programs to integration and responsibility division based on each agency youth policies.

Next steps: The LHPSM guiding the development of the result based monitoring system. The GIS was also now developing in parallel with the development of result based monitoring system and policies.

LHPSM for local government’s HIV prevention plan and actions

Data base formulation in development strategy
map for local government’s HIV prevention plan and actions

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LHPSM for local government’s HIV prevention plan and actions
Role of multilateral agencies and donors

MOPE1037

What do we know about integrating country coordinating mechanisms (CCMs) into pre-existing national coordination structures (such as national AIDS commissions)

C. Dickinson
HLSP Institute, London, United Kingdom

Issues: Calls for greater integration of Country Coordinating Mechanisms (CCM) with pre-existing national coordination structures (such as National AIDS Commissions - NACs) are being inadequately addressed at international policy or country level. Knowledge of where and how integration is happening and evidence that integration is improving the coordination of national HIV responses is scarce. We discuss some of the contextual factors influencing integration, how it is happening and what evidence we found for improvement of national CCMs. We also discuss some of the contextual factors influencing integration, how it is happening and what evidence we found for improvement of national CCMs. We also discuss the challenges that actors at the local level face in coordinating national HIV responses at the local level.

MOPE1038

The chicken or the egg? Funding mechanisms that help or hinder SRH and HIV integration

A. Trossen1, L. Obst2, R. Molutena1, M. Chatuluka1, D. Sitene1, L. Chimedze1, INTEGRA Research Team

- International Planned Parenthood Federation, United States
- International Planned Parenthood Federation Africa Region, Nairobi, Kenya
- London School of Hygiene & Tropical Medicine, London, United Kingdom
- Family Planning Association of Malawi, Lilongwe, Malawi
- Family Health International, Swaziland, Malawi

Background: There is widespread recognition that the importance of integrating sexual and reproductive health (SRH) and HIV. While great strides were made over the past years, many challenges remain. The verticalisation of funding structures for HIV and SRH and the existence of separate systems to account for these programmes are some of them. An analysis of current donors and foundations' policies was conducted to understand their practices and assess whether they are fuelling verticalisation or trying to harmonize responses across HIV and SRH.

Methods:
- Desk-based review and analysis of current HIV/SRH policies of select numbers of international donors.
- Structured questionnaire on the development and implementation of current donor policies and practices, including USAID, GAVI, DFID.
- Rapid assessment of country situation in Kenya, Malawi and Swaziland.

Results: Most donors reported not having a policy or specific funding streams to support work on linkages. Many reasons were highlighted including the lack of structural environment to promote and operationalize linkages at country level; existence of vertical plans, budget and M&E plans for SRH/ HIV and need for country level ownership to lead processes. However, changes are occurring. Kenya developed a unified national HIV/SRH strategy which should result in better synergies and donor support to SRH/HIV. Swaziland is in process to better align SRH and HIV programmes. In Malawi SRH and HIV programmes still run in parallel.

Conclusions: In countries with high HIV prevalence and poor maternal health indicators, linking HIV/SRH is a public health priority. Country level responses are affected by the existence of parallel funding streams and lack of harmonization. Global funding mechanisms have not yet proven successful to strengthen unified response to HIV/SRH linkages. Donors have a key role to play to help and influence country level action and should take responsibility for their part in continuing to support vertical responses.

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MOPE1039

Shooting oneself in the foot: is donor-imposed bureaucracy turning civil society organizations into malfunctioning machines?

M. Huff-Rousselle1, J. Toyoi1, E. Sala-Diakande2
1Social Sectors Development Strategies, United States
2Social Sectors Development Strategies, United States

Issues: Donor agency regulations and policies attached to financial aid in international health programs are designed to guarantee transparent financial administration, but often serve to undermine internal systems, duplicate national financial systems, even in the process of strengthening them. The presentation is based on findings from an independent evaluation of the initiative conducted 10 years ago:
- 1) A PhD dissertation that used qualitative methods to study seven regional- or national-level Caribbean organizations dependent on different donors;
- 2) Findings from applications of a financial assessment tool that scored seven CSOs receiving PEPFAR funding in Cote d’Ivoire, using 32 categories of questions and a 5-point scale.

Lessons learned: Although external funding was a significant source of support for the 14 organizations and their programs, the regulations and policies undermined efforts to unify management systems and financial administration in the following ways:
- 1) Fragmentation into a patchwork of mini-systems, responding to donor/project requirements, with no unified system;
- 2) Internal inconsistencies in policies and procedures;
- 3) Donor requirements taking precedence over internationally recognized accounting standards (e.g. project reporting takes priority over annual fiscal year reports;)
- 4) Federal-driven system strengthening that has become a historic artifact, filed away after the project is completed, as it was never an “organizational system”;
- 5) Donor and local level interactions.

Next steps: Findings highlight the need for organization-wide strengthening of CSOs, and a review of donor policies and practices in the way such policies are applied to CSOs.

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National and local government financing

MOPE1040-MOPE1042

MOPE1040

Evaluating the impact of federal, state, and local HIV prevention spending on HIV testing in the United States

A. Grossi
The AIDS Museum, Newark, United States, Rutgers University, Newark, United States

Background: The purpose of this research is to evaluate the relationship between HIV testing rates and national, state and local government spending on HIV prevention in the United States.

Methods: This study uses HIV testing data from the Center for Disease Control and Prevention Behavioral Risk Factor Surveillance System, a telephone survey generalizable to the adult U.S. population. The National HIV Prevention Inventory (compiled by the Kaiser Family Foundation and National Association of State and Territorial AIDS Directors) covers the fifty states and the District of Columbia, and includes how much money is allocated, by source, to each state for HIV prevention. Logistic regression is used to estimate the relationship between the likelihood that individuals (n=233,377) were tested in 2008 and the amount of money per capita spent on prevention in that state in 2007 by revenue source.

Results: Controlling for demographic variables, a one dollar increase in state/local spending per capita on prevention was associated with a .08 increase in the odds that an individual in that state was tested (p< .001). A one dollar per capita increase in the federal allocation per state was associated with a .15 increase in the odds that an individual in the state was tested (p< .001). The increase in odds ratios for women (n=145,073, 62%) were similar to those for men.

MOPE1041

The AIDS Museum, Newark, United States, Rutgers University, Newark, United States

Background: HIV/AIDS prevention policies and practices need to be evaluated in order to improve and sustain population-level impact. The purpose of this research is to evaluate the relationship between HIV prevention spending and HIV testing rates in the United States.

Methods: This study uses HIV testing data from the Center for Disease Control and Prevention Behavioral Risk Factor Surveillance System, a telephone survey generalizable to the adult U.S. population. The National HIV Prevention Inventory (compiled by the Kaiser Family Foundation and National Association of State and Territorial AIDS Directors) covers the fifty states and the District of Columbia, and includes how much money is allocated, by source, to each state for HIV prevention. Logistic regression is used to estimate the relationship between the likelihood that individuals (n=233,377) were tested in 2008 and the amount of money per capita spent on prevention in that state in 2007 by revenue source.

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The AIDS Museum, Newark, United States, Rutgers University, Newark, United States

Background: The purpose of this research is to evaluate the relationship between HIV testing rates and national, state and local government spending on HIV prevention in the United States.

Methods: This study uses HIV testing data from the Center for Disease Control and Prevention Behavioral Risk Factor Surveillance System, a telephone survey generalizable to the adult U.S. population. The National HIV Prevention Inventory (compiled by the Kaiser Family Foundation and National Association of State and Territorial AIDS Directors) covers the fifty states and the District of Columbia, and includes how much money is allocated, by source, to each state for HIV prevention. Logistic regression is used to estimate the relationship between the likelihood that individuals (n=233,377) were tested in 2008 and the amount of money per capita spent on prevention in that state in 2007 by revenue source.

Results: Controlling for demographic variables, a one dollar increase in state/local spending per capita on prevention was associated with a .08 increase in the odds that an individual in that state was tested (p< .001). A one dollar per capita increase in the federal allocation per state was associated with a .15 increase in the odds that an individual in the state was tested (p< .001). The increase in odds ratios for women (n=145,073, 62%) were similar to those for men.
Conclusions: Previous research has demonstrated the relationship between HIV testing and federal allocations to states for HIV prevention. Using new data on the extent that spending by states and local governments may also have a significant impact on whether individuals get tested for HIV. The results suggest a combination of approaches to centralized and decentralized spending on HIV prevention programs may effectively encourage more individuals to seek an HIV test.

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MOPE1041

Innovative domestic financing for the HIV/AIDS sector in Kenya: potential contribution of airline levies and increase in health budget allocations


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Issues: Kenya is highly dependent on external sources to finance 75% of HIV/AIDS expenditures (NAPA 2006/7). For sustainability and increased local ownership, innovative domestic financing sources are needed. We estimated the potential contributions of new levies and a general increase in government health spending.

Description: We considered two proposals. First, a levy on airline traffic, as used in Europe and Africa to finance HIV/AIDS (UNITAID). Given the price elasticity of air traffic demand, a small levy on air tickets/cargo will not affect volumes of projected air traffic for 2010-2015 and health spending based on trends in historical traffic from 2004-2008. Domestic and international passenger/cargo movement was considered in the data. Sensitivity analysis was conducted on various rates of the levy.

Second, the impact of Kenya meeting the Abuja Declaration target of spending 15% of the government budget on health. Kenya is a signatory country for the Declaration. In FY 2006/2007, this figure was 5.2% Kenyan. Potential increases in HIV/AIDS resources were estimated from the revised health financing envelope, and based on an estimated level of 6.4% of the health budget spent on HIV/AIDS (National Health Accounts 2005/06).

Lessons learned: We evaluated various rates for the airline levy and benchmarked to the median of the international range. A levy of $2.50 per leg of domestic and international flights, and a flat $0.05/cargo levy on cargo would mobilize about US$116 million over five years for HIV/AIDS or other priority conditions. If the government met Abuja targets, an additional US$419 million would be raised for HIV/AIDS at current proportionate spending levels (incrementing the US$217 million at status-quo).

Next steps: The Kenyan government is considering options to increase resources for the HIV/AIDS sector with a cabinet paper. Both proposals here (incrementing the US$217 million at status-quo).

MOPE1042

Monitoring of HIV/AIDS and TB budgets and expenditures in South Africa: a community monitoring effort to improve social accountability

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Issues: The demand for ARVs in South Africa is increasing as more people are presenting themselves at community health care facilities for HIV/AIDS services. However, there is insufficient capacity for civil society and local government officials themselves to monitor the HIV/AIDS and TB budgets and expenditures to ensure that treatment needs are addressed. Thus, it is essential that efforts are made to monitor budgets allocations for, expenditures on and capacity to deliver HIV/AIDS and TB interventions in the country.

Description: The Centre for Economic Governance and AIDS in Africa (CE-GAA) and the Treatment Action Campaign (TAC) developed a budget monitoring and expenditure tracking (BMET) project in South Africa to monitor and enhance national, provincial and district budgets and expenditures on HIV/AIDS and TB, support the capacity of citizens, communities, District and Local AIDS Councils and district health/local government officials to engage with budget processes and strategies, planning, and to monitor budget for HIV/AIDS and TB services, so as to increase the efficiency and effectiveness of spending, leading to enhanced service delivery.

Lessons learned: The project has contributed in the building and strengthening of capacity for civil society and AIDS councils to engage with the budget process by collecting relevant financial and service data, analysing it and developing relevant advocacy messages and recommendations for government, service providers and policymakers. Community monitoring activities are important in promoting social accountability which has eventually facilitated delivery of good quality government services.

Next steps: The project provides various platforms for civil society to engage with budget and expenditure issues, through participatory monitoring and evaluation activities. Various community activities are planned to disseminate the findings and to conduct public hearings on the budget and expenditures for HIV/AIDS and TB. The government needs to invest time and money in district health and budget processes to ensure that real community needs are addressed. Presenting author email: nnhlanhia.ndlovu9@gmail.com

International assistance and funding mechanisms

MOPE1043

Monitoring the performance of privileged countries as donors through detailed and comprehensive analysis of international assistance for health promotion and HIV control: the case of Germany

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Issues: In view of the structural disadvantage and the enormous disease burden in many developing countries, financial cooperation from better-off countries is indispensable for achieving universal access to essential services. Civil society plays a critical role to hold governments of industrialized nations accountable to contribute their fair share. This requires an accurate and reliable analysis of the financial contributions paid for promoting health and/or controlling the HIV epidemic.

Description: The author developed a methodology to estimate the respective volumes of the official development assistance (ODA) for these purposes which takes into account all relevant financing mechanisms. This research does not rely merely on the categorization of projects done by donors when reporting to the databases of the Development Assistance Committee (DAC). Instead, it comprises a review of the bilateral aid activities implemented by Germany, the European Commission and other donors. The Centre strives to identify those contributions that coincide with the interventions included in the DAC reporting to the databases of the Development Assistance Committee (DAC).

Next steps: Currently the analysis is updated for the year 2008 on the basis of information which recently became available through the databases of DAC. The experience gained shows that these consolidated estimates represent a valid instrument for political advocacy efforts by German civil society organizations. The methodology might be of interest to assess the financial contributions of other donors as well.

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MOPE1044

How the US President’s Emergency Plan for AIDS Relief, Global Fund to Fight AIDS, Tuberculosis, Malaria, and World Bank multi-country AIDS programs are addressing women’s vulnerability in the context of the HIV and AIDS epidemic in Mozambique, Uganda, and Zambia

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1International Center for Research on Women, Health and Development, Washington, DC, United States, 2Center for Global Development, Washington, DC, United States, 3Makerere University, Kampala, Uganda, 4Austral-Cowie Consulting, Maputo, Mozambique, 5University of Zambia, Lusaka, Zambia

Issues: Previous research has demonstrated the relationship between sex-disaggregated data, but gender-related programming was driven by global strategic areas, not country-specific objectives. The Global Fund’s new gender strategy requires reporting sex disaggregated data and incorporating sex results of gender analysis into country operationalizing Mechanisms and Local Funding Agents lack gender expertise, limiting donors’ gender strategy requires reporting sex disaggregated data and incorporating sex results of gender analysis into country operationalizing Mechanisms and Local Funding Agents lack gender expertise, limiting donors’ gender responsiveness. The World Bank/GER provides tools and guidelines to build capacity in integrating gender-sensitive approaches, but monitoring of gender-related programming is underdeveloped, particularly at the community level. Gender-specific indicators were monitored by the three donor-supported programs.

Lessons learned: This study was designed to fill this void by addressing gender analysis and comprehensive analysis of international assistance for health promotion and HIV control: the case of Germany.

Next steps: The study aims to expand the analysis to other case countries.

Methods: We reviewed policy and program documents from 2000-07; with country-based researchers, conducted interviews and focus groups with donor and government officials, program implementers, and beneficiaries in each country. A framework was developed for data analysis.

Results: Policy documents in all three countries identified a need to address gender dimensions of HIV. We found operational challenges in bridging gaps between policies and programs; and in added sex-disaggregated data and incorporating sex results of gender analysis into country operationalizing Mechanisms and Local Funding Agents lack gender expertise, limiting donors’ gender strategy requires reporting sex disaggregated data and incorporating sex results of gender analysis into country operationalizing Mechanisms and Local Funding Agents lack gender expertise, limiting donors’ gender responsiveness. The World Bank/GER provides tools and guidelines to build capacity in integrating gender-sensitive approaches, but monitoring of gender-related programming is underdeveloped, particularly at the community level. Gender-specific indicators were monitored by the three donor-supported programs.

Conclusions: Donors should coordinate country-level gender analysis to avoid duplication of effort, and the development of gender sensitive indicators, and learn from successful, ongoing gender sensitive programming. Do-
MOPE1045
Country experiences with Global Fund national strategy applications - what worked, what didn't?

A. Nitschbe-Bel, A.S.S. Dragolj, I. Hakkinja, B. Chibwana, H. van Renterghem, P. Gadow, E. Morah
UNAIDS Regional Support Division, Geneva, Switzerland; National AIDS Council Kenya (NACC), Nairobi, Kenya; ICM Rwanda, Kigali, Rwanda; National AIDS Commission, Lusungu, Malawi; UNAIDS/UNFPA/UNICEF/UNDP, Johannesburg, South Africa; Freelance Consultant, Delhi, India; UNAIDS, Nairobi, Kenya

Issues: The GFATM National Strategy Application (NSA) modality has highlighted the need for national disease strategies with solid strategic and operational planning, cost and budgeting, participation and inclusion, and performance-related disbursement and accounting. Adequate guidance, tools and models are not always readily available; both within country programme teams and their partners.

Description: Three countries submitted funding requests through the NSA First Learning Wave (FLW) - totalling US$ 1 billion. One was approved. UNAIDS commissioned a study of the FLW, both at country and global level. A number of issues stand out: 1) the wide recognition of the benefits of the modality; 2) the improvements in National Strategic Plans (NSP) resulting from the focus on them as funding foundations; 3) the difficulties countries faced in using results based management and other planning tools; 4) the need to find greater ownership, depth and rigour for the assessment of NSPs; 5) the need to ensure that NSAs strengthen the engagement of civil society.

Lessons learned: The study suggests that the NSA modality is an important, practical, and welcomed innovation. But UNAIDS needs to work more closely with the partners to ensure NSPs effective in more countries. Countries need significantly strengthened TS to make full use of the modality.

Next steps: Rather than simply throwing the NSA modality open to all comers, UNAIDS, interested countries, the GFATM itself, and concerned partners need to work together with the PM to ensure that these countries can move forward in the right way to support their right on ART roll out. UNAIDS needs to provide better tools, models and guidelines to support country programme teams and their partners.

MOPE1046
Trends in U.S. support for international female condom procurement, distribution, and programming

S. Sippel, S. Whaley
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Issues: The female condom is a life-saving prevention tool that protects against HIV/STIs and unintended pregnancy and is designed to be initiated by women. Despite their critical role in HIV prevention, female condoms remain underutilised, largely inaccessible, and no longer considered a priority by funders. The fragility of current and future funding makes scale up and sustaining of treatment extremely vulnerable, as shown by various supply disruptions under GFATM grants recently.

Description: The funding stream dynamics is needed to assess the impact on current and future ART roll out. Urgent measures should be taken to minimise risks of disruptions of female condoms supply.

Next steps: Transparent mapping of funding stream dynamics is needed to assess the impact on current and future ART roll out. Urgent measures should be taken to minimise risks of disruptions of female condoms supply.
MOPE1049
Maximising the impact of technical support - how, where and when?

A. Saetrea
UNAIDS, Global Fund Unit, Technical Support Division, Geneva, Switzerland

Issues: UNAIDS and WHO commissioned an evaluation study to assess the technical support (TS) provided to Global Fund round 9 proposal development. The study aimed at identifying successes, gaps and challenges in TS provision to countries that applied for Global Fund (GloF) in 2009 and developing clear recommendations for enhanced and better targeted work in the future. The study stimulated a discussion within the two agencies on how to prioritize a limited number of countries to receive TS in the future.

Methodology: The study uses a mixture of evaluation methodologies. A survey was carried out among 60% (38) of UNAIDS Country Coordinators and 50% (30) of Country Coordinating Mechanisms in countries that submitted round 9 proposals. Key informant interviews were conducted and in-depth case studies were carried out in selected countries. For each deliverable, main evaluation criteria were relevance, effectiveness, efficiency, impact and sustainability.

Lessons learned: TS provision is often perceived as driven by countries requiring support for their projects. A “first come first served” mentality might lead to a neglect of countries with fewer resources to articulate their TS needs “on time”. The study has also questioned whether “high-risk” countries have received appropriate support. Clear recommendations on how to make TS more targeted, result oriented and cost-effective, as well as improving the coordination and quality assurance of TS provision, are put forward. Findings from this evaluation will be examined in a broader context and other strong studies of TS provision will be considered to deepen our understanding on TS provision in general.

Next steps: The findings will provide good guidance for the planning of round 10 support, and guide decision making related to technical support prioritization.

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MOPE1050
Rethinking priority target populations in Nigeria: an analysis of results from recent HIV biomarker surveys

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Background: Prevalence of HIV has been based on estimates from HIV sentinel surveys among pregnant women attending antenatal clinics (ANC) and surveillance surveys of key target populations (KTPs). But are we really looking at data in taking programming decisions? This paper reviews HIV prevalence rates from recent surveys and suggests new priority populations for interventions.

Methods: In 2007-2008, with support from USAID, Federal Ministry of Health in Nigeria and the Society for Family Health conducted a population-based biomarker survey, NARHS+, and the first Integrated Bio-Behavioural Surveillance Survey (IBBSS). This was also implemented in the same year: KTPs tested included brothel and non-brothel based sex workers, transport workers, uniformed service men, men who have sex with men and injecting drug users. The sample for the NARHS+ was a representative sample of the general population, and for the IBBSS, from special sampling techniques including respondent driven sampling for KTPs.

Results: The national estimated HIV prevalence in NARHS+ was 3.6% compared to 4.6% in the 2008 ANC survey. Prevalence was higher among females (4.0 vs. 3.2%, p<0.0001) and in urban areas (3.8 vs. 3.5%, p=0.0047). Prevalence was higher among divorced (3.9%), widowed (4.0%) and separated (7.4%) respondents. KTPs tested for HIV in Nigeria, prevalence among sex workers, MSMs and IDUs was expectedly high, but surprisingly, prevalence of HIV in 2 groups: members of the armed forces, and transport workers, were below general population prevalence rates. Prevalence rates for inmates were 7.1%.

Conclusions: Attention should be devoted by implementers to a careful determination of actual groups at risk of HIV infection at the local level, as Nigeria is at a generalised stage of HIV epidemic, and many groups previously considered as low risk may need to be targeted with interventions. Incidence modeling will also need to be developed at sub-national levels to inform programming.

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Ethical issues in priority setting and resource allocation

MOPE1050-MOPE1051

UNAIDS, Global Fund Unit, Technical Support Division, Geneva, Switzerland

Issues: UNAIDS and WHO commissioned an evaluation study to assess the technical support (TS) provided to Global Fund round 9 proposal development. The study aimed at identifying successes, gaps and challenges in TS provision to countries that applied for Global Fund (GloF) in 2009 and developing clear recommendations for enhanced and better targeted work in the future. The study stimulated a discussion within the two agencies on how to prioritize a limited number of countries to receive TS in the future.

Methodology: The study uses a mixture of evaluation methodologies. A survey was carried out among 60% (38) of UNAIDS Country Coordinators and 50% (30) of Country Coordinating Mechanisms in countries that submitted round 9 proposals. Key informant interviews were conducted and in-depth case studies were carried out in selected countries. For each deliverable, main evaluation criteria were relevance, effectiveness, efficiency, impact and sustainability.

Lessons learned: TS provision is often perceived as driven by countries requesting support for their projects. A “first come first served” mentality might lead to a neglect of countries with fewer resources to articulate their TS needs “on time”. The study has also questioned whether “high-risk” countries have received appropriate support. Clear recommendations on how to make TS more targeted, result oriented and cost-effective, as well as improving the coordination and quality assurance of TS provision, are put forward. Findings from this evaluation will be examined in a broader context and other strong studies of TS provision will be considered to deepen our understanding on TS provision in general.

Next steps: The findings will provide good guidance for the planning of round 10 support, and guide decision making related to technical support prioritization.

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UNAIDS, Global Fund Unit, Technical Support Division, Geneva, Switzerland

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MOPE1051
Keep it simple keep the promise

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Issues: The British Government has played a pivotal role in assisting Nepal to the rapid rolling out of life saving antiretroviral treatment (ART) that today covers over 3500 people living with AIDS. As WHO is suggesting the ART treatment eligibility criteria threshold to be increased to 350 from the current 200 levels, it is very likely that those needing treatment will double in the coming months. With 7000 people on treatment by 2010 the cost of treatment alone will fetch an annual 168 million Rupees and 2.4 million dollars at minimum with just the first line regimen.

Description: The British Government have already announced withdrawal of bilateral support for AIDS in Nepal - every single person living with AIDS in Nepal are haunted with more questions ‘how long will I be alive?’ Am I cost effective or not? What will happen to my kids? The war is on but the ‘war chest’ is empty. Shifting focus to other priorities with less than five years left is only further justifying and legitimizing our fear that donors are ill informed and confused on the way forward in achieving the millennium development goals.

Lessons learned: Calling for a shift of funding from HIV in order to address broader health needs. Shifting funding from HIV will not fill the yawning gaps in resources for health - this move is a cheap diversionary tactic that offers no genuine or long-lasting solutions for health. What is required is a shift in political will to prioritize and invest vigorously in health.

Next steps: Health systems need strengthening, and neglected health problems need attention. But it is irrational, regressive and dangerous to pursue these goals at the expense of HIV.

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<table>
<thead>
<tr>
<th>Name</th>
<th>ID1</th>
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<th>ID3</th>
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<td>2:THPE0105</td>
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<td>2:THPE0206</td>
<td>1:TUPE0207</td>
</tr>
<tr>
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<td>2:WEPE0208</td>
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</tr>
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</tr>
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<td>1:THPE0105</td>
</tr>
</tbody>
</table>

**Please note:** The table continues with additional entries, but has been truncated for brevity. The full list can be obtained from the original source.
Author Index

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XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria
AIDS 2008 • XVII International AIDS Conference • 3-8 August 2008, Mexico City

XVIII International AIDS Conference | July 18-23 2010 | Vienna, Austria

www.aids2010.org • Abstract Book Volume 1
Author

Index

Monday
19 July

Zhu H. 1:MOAB0302
Zhu J. 2:THPE0299
Zhu Q. 2:THPE0299
Zhu S. 2:WEPE0352
Zhu X. 1:TUPE0856
Zhu X.Z. 2:THPE0610
Zhu Z. 2:PRLB0166
Zhukov I. 2:THPE0964
Zhurkova A. 2:THPE0935
Ziebell R.A. 2:THPE0349
Ziegler P. 1:MDAA0101
Ziemer D. 2:WSAA0105
Zihalirwa G. 1:TUPE0277
Zijenah L. 2:THPE0356
Zijenah L.S. 2:THAA0105
Zijstra J.A. 1:MOPE0862
Ziluwa N. 1:THPE0727
Ziluwa Dal Verme L. 1:MOPE0206
Zimba C.C. 1:MOPE0407,
  1:MOPE0622
Zimba S. 1:MOPE0419
Zimbal R.A. 2:THPE0608,
  1:TUPDC0104
Zimmerman C. 1:MOPE0282,
  1:TUPE1055, 2:THPE0833
Zimmerman M. 2:WEPE0408
Zimmerman M. 1:TUPE0077
Zimmermann R. 2:THPE0334
Zimmermann J. 1:TUPE0150
Zimulonda E. 1:MOPE0437,
  2:THPE0764
Zingman B. 2:THPE0899
Zinkiewicz P. 2:THPE0217
Zinayama-Gustav R. 1:TUPE0042,
  1:TUPE0123, 1:TUPE0128
Ziske J. 1:MOPE0267
Ziko R. 2:THPE0093
Ziv J. 1:MOPE0388
Zito M. 1:TUPE0914
Zolopa A. 1:MAAE0403,
  2:WEPE0581
Zomigian A.A. 2:WEPE0045
Zona S. 2:WEPE1034
Zopunyan V. 1:TUPE0103
Zorritta C. 1:TUPE0155
Zou X. 1:TUPE0449
Zoutaly A. 2:THPE0123
Zoure N.R. 2:THPE0456
Zubik W. 1:TUPE0917
Zuccarino N. 2:THPE0787
Zucchetti A. 1:TUPE0105
Zuchelli P. 1:TUPE0097
Zugazaga Badal E. 1:MOPE0192,
  1:MOPE0194, 1:TUPE0252
Zuhlhofer W. 1:MOPE0753,
  2:THAC0206
Zuka S. 1:MOPE0799
Zukurov J. 2:WEPE0825
Zulaica D. 2:THPE0277
Zule W. 1:TUPE0224, 1:TUPE0317,
  1:TUPE0497, 2:WEPE0208,
  2:WEPE0548, 2:WEPE0555
Zule-Mbowe R. 2:THPE0580
Zulu P. 2:THPE0161, 2:WEPE0205
Zulu W. 1:MOPE0377
Zuma K. 2:THPE0109
Zuma-Mkhonzu M. 2:THPE0792
Zuniga J.M. 2:THPE0104
Zúñiga M. 1:TUPE0804
Zúñiga M.L. 1:TUPE0530
Zúñiga M.L. 2:THPE0693,
  2:WEPE0090
Zunt J. 1:MOPE0897, 1:TUPE0804,
  2:WEPE0081
Zunt J.R. 2:WEPE0600
Zunuzungu M.V. 1:MOPE00103
Zupkosky J. 2:WEAA0404
Zurita S. 1:TUPE0249
Züst A. 2:LBPE112
Zuire F. 1:MOPE0438
Zverkov K. 2:THPE0850
Zverkova I. 2:WEPE0892
Zweigner J. 1:MOPE0193
Zylberberg L. 2:THPE0918

Tuesday
20 July