

sites through FSWS peer educators; mobile VCT camps; community-level task forces; and building robust linkages with government centres for referral.

**Lessons learned:** From 2001 to 2004, the tele-counselling and City Counselling Centre counselled a total of 1261 persons and tested 1228. In 2005, provider-initiated VCT counselled and tested 2578 FSWS and partners in sex work sites - almost nine-fold increase from 2004.

**Recommendations:** It is possible to identify and overcome the barriers of testing and care for FSWS through provider-initiated interventions designed, run and managed by FSWS themselves. The MCTC experience is an example of "out of the box" approach to increasing acceptability of VCT and care and support among marginalised communities that needs further research to develop a strong evidence-base for "good practices" with other key populations.

### THPE0245 Paediatric HIV in a tertiary health facility in Nigeria

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**Background:** Paediatric HIV infection is a major concern for workers involved in the care of children. Although HIV control programmes have been in place in Nigeria since the late 1990s, the impact on the disease prevalence in the adult population and therefore on the Paediatric population has remained minimal in Nigeria. The objectives of this work are therefore to describe the epidemiology of paediatric HIV infection and highlight important management and preventive issues.

**Methods:** All children aged 0-15 years that tested positive for HIV-infection by double ELISA test were entered into the study proforma. Data collection was retrospective from 1997-2000 and prospectively from 2001-2005. Children who seroconverted were excluded from data analysis. Data collected on each child included the sociodemographic characteristics, risk factors for HIV, clinical features, management and outcomes. Data were entered using Epi Info version 3.3 and Excel and were analyzed using either EPI info or SPSS version 11.

**Results:** Five hundred and one HIV-infected children aged 0-180 months [mean age 26.8m] received care at the facility. The number of cases increased yearly to a peak of 120(24%) in 2002 before it started decreasing. The likely modes of transmission were vertical in 91.7%, blood transfusion-related 7.9% and 0.4% sexual. 71% children were their parent's 1st or 2nd children. 87.5% were delivered vaginally, 31 mothers had ART in pregnancy, 27 babies had ART at birth and 43% received mixed feeding. 82.2% women were in monogamous marital setting. The major presenting symptoms in the children were fever (39.1%), cough (33.3%), diarrhea (23.4%), hepatomegaly (20.8%), generalized lymphadenopathy (20.0%) and weight loss (19.6%). 17.9% had died, 43.2% are still alive while 38.9% are lost to follow up.

**Conclusions:** PMTCT is still at the rudimentary level. Introduction of ART has greatly improved the outcome of the HIV-infected children; however lots of children are lost to follow up

### THPE0246 Telemedicine to improve HIV care in resource-limited settings

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**Issues:** Telemedicine is a way to support physicians working in resource-poor settings, providing remote consultations and continuing medical education on HIV/AIDS care. The speed at which clinicians are going to be trained and mentored is an important determinant of how quickly access to antiretroviral therapy (ART) can be scaled up in resource-limited settings.

**Description:** Since 2003 the Institute of Tropical Medicine in Antwerp (ITMA) set up a computer-aided training service to support physicians in developing countries through an online consultations system in the field of management of opportunistic infections (OIs) and ART. The ITMA telemedicine service has been organised initially through an e-mail network and later, in response to the need for continuous medical education on HIV and ART, through a discussion forum on a telemedicine web site (<http://telemedicine.itg.be>).

**Lessons learned:** During almost 3 years of activity (April 2003- December 2005) the system received 456 referrals from 29 different countries: 341 (75%) of the referrals were difficult clinical cases and 115 (25%) open questions. Of the total queries, 62% were related to ART (side effects, second line, HIV mother-to-child transmission, immune reconstitution, TB/HIV co-infection) and 42% to the diagnosis and treatment of specific OIs. Interesting posts and recurring questions from the discussion forum were elaborated as case rounds and frequently asked questions, available on the Telemedicine website for consultation. Online education and support is also provided through interactive quizzes, user-friendly guidelines, and policy documents with a particular focus on HIV/AIDS care in developing countries.

**Recommendations:** Telemedicine is a cheap and effective method of providing clinical support and continuing education to healthcare workers treating HIV-positive patients in resource-poor countries. By giving to clinicians the opportunity to access continuous support through a discussion forum and to

## Track C

### THPE0247 High risk settings strategy: an 'emergency' response to HIV in Papua New Guinea

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**Issues:** PNG is the 4th worst hit country in the SEA-Pacific region with prevalence rates already exceeding 1.5% (generalised epidemic), increasing exponentially. Its mostly young population is highly mobile, and made up of over 700 different ethnic groups and languages. Recent studies have shown that most people know about HIV/AIDS, but little has changed in terms of high risk behaviours, despite all efforts made.

**Description:** In early 2004, a new bottom-up prevention initiative was devised to promote safer sex practices among most vulnerable populations, taking mobility and cultural diversity into consideration. The High Risk Settings Strategy (HRSS) aims at building capacity and empowering communities at higher risk, by providing them with knowledge and tools to better respond to the epidemic. It focuses on young women and men who live or congregate at sites ('hot spots') where sex is traded for money or goods. Priority was given to market and entertainment sites along highways and ports, villages in and around mining, sugar and palm oil industries, main military units, and settlements in major urban areas. What differentiates this approach is that self-identifying communities at risk, form their own site committees, have their volunteers trained in 'behaviour change communication' and peer education, and develop and carry out their own interventions, based on safer sex promotion.

**Lessons learned:** The sense of community ownership of the HRSS has been greatly enhanced by local partnerships with private sector and CBOs/NGOs, including faith-based organisations. Very innovative activities, that are both community-relevant and culturally acceptable, have been implemented. Fourteen of the 20 provinces are presently involved in the initiative, with 25 HRS pilot-sites fully operational.

**Recommendations:** In order to further promote sustainability of the HRSS, local partnerships with private sector and NGOs should be continued together with strengthening of managerial and monitoring skills, followed by decentralisation of funds and decision-making on future steps.

### THPE0248 As little as one peer educator can increase acceptance of HIV testing in a PMTCT programme

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**Issues:** Not all women attending antenatal clinics accept HIV testing, an essential step in prevention of mother-to-child transmission of HIV (PMTCT). Lumumba Health Centre, the busiest municipal maternity facility in Kisumu, Kenya, receives 150 new antenatal clients per month. Only 77% of their antenatal clients agree to HIV-testing. Staff identified lack of counselling time as a major barrier to reaching all antenatal clients and to obtaining their consent for testing.

**Description:** FACES (Family AIDS Care and Education Services) asked Lumumba staff to select an HIV-positive woman who had completed the PMTCT program and who could discuss her experiences with pregnant women. The peer educator underwent 4 days of training on Treatment Literacy conducted by Medecins Sans Frontieres Belgium, as well as ongoing mentoring by FACES. The peer educator speaks with all women registering at the antenatal clinic. She shares her personal testimony, explains the PMTCT process, encourages women to involve their partners in the process, and answers questions before sending them to the PMTCT counsellor. She receives a daily stipend of \$2.5.

**Lessons learned:** Since the peer educator started, Lumumba's PMTCT counsellors are now able to reach all antenatal clients due to a decreased time required for pre-test counselling. During the first 4 months of this programme testing acceptance rate has increased to 87%. No other changes in services of staff had been implemented during this period. Some women still do not agree to HIV-testing because they want their husbands' permission, which is less likely to be granted when he is absent from antenatal visits.

**Recommendations:** Peer educators should be incorporated into PMTCT programs. Given that many HIV positive women are not employed, the stipend offered can be an important source of income for the peer educator and remains affordable at the programme level. More attention to involving the male partner in PMTCT is needed.

Partners  
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**Background:** Low cost, sustainable behavioral interventions that can reach high-risk populations are essential for reducing new HIV infections among injection drug users and their sex and drug risk network members. These interventions need to engage participants in meaningful social roles and risk reduction activities and diffuse behavior change throughout risk networks.

**Methods:** An equal attention double-blind randomized control trial was developed for injection drug users and their sex and drug risk partners. The trial included six small group sessions including active drug users, and highly motivated members of their risk networks. The participants' training focused on teaching communications skills and enhancing motivation. The trial's goal was to train the peer educators to promote social norms of risk reduction among their risk network members and throughout the larger community.

**Results:** Using data from the six-month follow-up, an intent-to-treat analysis examined risk behaviors among the first 125 index cases and their risk network members. Index participants in the experimental condition were significantly more likely than those in the equal attention control condition (Chi Square = 10.5, p < .01) to report using safer methods of splitting their drugs and marginally less likely to report needle and cooker sharing (t = -1.89, p < .07) and more likely to report talking to family members about HIV prevention (Chi Square = 3.22, p < .10). Risk network members of those in experimental condition also reported significantly less sharing of cookers as compared to network members of the control group (Chi Square = 8.148, p < .01).

**Conclusions:** The results of this study suggest that active injection drug users can be trained to teach others methods of HIV risk reduction and that these activities may lead to a reduction in the HIV risk behaviors among the drug using peer educators and among their network members.

### THPE0250 Long-term changes in high-risk sexual behaviors between community and court recruited female cocaine-users in St. Louis

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**Background:** Since the late 1980's, United States diversion programs have focused on managing the increasing numbers of drug related arrests. HIV prevention intervention efforts aligned with these "drug courts" have the potential to influence recalcitrant behaviors including high-risk sex and drug use. Women from the St. Louis Female Diversion Court were recruited to supplement an existing NIDA-funded (DA11622) community-based HIV prevention intervention trial.

**Methods:** The Women Teaching Women study (WTW) randomly assigned women to 1 of 3 groups: the NIDA standard intervention alone, the standard plus well-woman exam, or the standard, plus well-woman exam, and peer-delivered educational sessions. The present analyses focus on changes in high-risk sexual behaviors between baseline and the 12-month follow-up interview among court (CT; N=104) and community (COMM; N=364) recruited cocaine-using women.

**Results:** Baseline demographic data indicated CT women compared to COMM were younger (CT=36, COMM=38 years of age), less likely to be African American (CT=70%, COMM=91%), undereducated (CT=71%, COMM=54%), and more likely to report lifetime history of sex trading (CT=73%, COMM=41%). Both groups reduced high-risk sexual behaviors post-intervention, and reported fewer sexual partners at the 12-month follow-up compared to baseline. Overall, CT respondents reported 6.0 sex partners at baseline and 2.7 at 12-months, while COMM respondents reported 2.6 partners at baseline and 2.4 at 12-months. CT respondents were more likely than COMM respondents to reduce or quit sex trading between baseline and the 12-month follow-up (CT=26%, COMM=16%). Additional analysis will focus on the differential impact of the randomized intervention assignment on high-risk sexual behaviors between baseline and the 12-month follow-up.

**Conclusions:** These findings suggest that even the highest risk drug-using women are able to initiate healthier behaviors to reduce the risk of contracting HIV. Further analyses regarding the reduction of changes in drug use behaviors are forthcoming.

### THPE0251 Sexual risk reduction interventions do not inadvertently increase the overall frequency of sexual behavior: a meta-analysis of 174 studies with 116,735 participants

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**Background:** A meta-analytic review of the influence of HIV-risk reduction interventions on infrequently explored sexual frequency outcomes, including sexual occasions, number of partners, and abstinence was conducted. The main

design, and provided sufficient information to calculate effect sizes. Data from 174 studies (206 interventions, N=116,735 participants) were included.

**Results:** Across all samples and interventions, HIV-risk reduction interventions (including condom education / promotion programs) neither increased nor decreased sexual occasions or number of partners reported (mean ESs = -0.004, 95% confidence interval [CI]: -0.033, 0.025 and 0.008, 95% CI: -0.012, 0.028, respectively). Participants in control conditions were more likely to be sexually active than those in intervention conditions (mean ES = 0.026, 95% CI: 0.002, 0.050). Moderator analyses indicated that interventions reduced the number of sexual occasions when samples included more Black participants ( $\beta = 0.276, p = .033$ ); interventions were more successful at reducing the number of partners in samples that included more men who have sex with men (MSM;  $\beta = 0.277, p < .001$ ) or individuals engaged in sex trading ( $\beta = 0.231, p = .002$ ). Samples that included more MSM were more likely to adopt abstinence as a risk reduction strategy ( $\beta = 0.222, p = .024$ ). Consistent with behavioral science theory, interventions that included more information, motivational enhancement, and skills training led to greater risk reduction.

**Conclusions:** HIV-risk reduction interventions do not increase the overall frequency of sexual activity. To the contrary, for some "at risk" sub-groups, interventions reduce the frequency of sexual events and partners, especially when interventions include behavioral science theory-related components.

### THPE0252 Effects of a structural intervention for the prevention of intimate partner violence and HIV in South Africa: a cluster randomized trial

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**Background:** HIV infection and intimate partner violence (IPV) share a common risk environment in much of southern Africa. We implemented a structural intervention that combined a microfinance (MF) programme alongside a gender and HIV training curriculum and explored changes in economic well-being, gender inequity, social capital and specific vulnerability to HIV and IPV.

**Methods:** Employing a cluster-randomized design, 8 villages were pair-matched and allocated to receive the intervention at onset or 3 years later. A two-part participatory learning and action curriculum was integrated into fortnightly MF meetings with groups of approximately 40 women. A first phase of structured sessions on gender and HIV was followed by a second phase geared towards community mobilization. Changes were assessed over a 2-3 year period among direct programme participants, young people in their households and randomly selected young people from the wider community. Analysis was per protocol.

**Results:** Among female programme participants, consistent improvements were observed in household economic well-being and levels of social capital including community mobilization. Improvements in both empowerment and the status of women within relationships were observed. Within this group, 12 month experience of physical and/or sexual abuse was reduced by half (aRR 0.48 CI 0.21-1.1). Effects on vulnerability to HIV were modest among indirect programme recipients. Improvements in knowledge, openness, communication and access to testing were observed amongst 14-35 year old household members, though effect sizes were small. No behavioural changes were observed. Among 14-35 year olds in the wider community, there were suggestions that partner numbers were reduced. HIV incidence was similar between intervention and comparison villages.

**Conclusions:** Integrated development strategies using MF may play an important role in reducing structural vulnerabilities to HIV and IPV in southern Africa. Effects on levels of IPV, even in the short term, have the potential to be pronounced.

### THPE0253 Female condom skills training is efficacious in increasing female condom use and protected sex among ethnically-diverse women attending family planning clinics

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**Background:** The female condom is the only female-controlled barrier method currently available to protect women from HIV. Yet little research has been conducted to identify effective approaches to promote use of this barrier method.

**Methods:** We conducted a randomized clinical trial with 407 women recruited from family planning clinics in the San Francisco Bay Area from June 2003 to November 2004. Eligible women (aged 18-39 and had 2+ male sex partners in the previous year) were randomly assigned to either the experimental condition female condom skills training (FCST) or the comparison condition women's general health promotion intervention (WGHP). Both interventions consisted of one group and two individual sessions. All participants received condom use instructions at baseline and received male and female condoms during