

**P4.034 EFFECTS OF PARTNER DISCLOSURE ON CLINICAL OUTCOMES AMONG HIV INFECTED ADULT INITIATING ART**

doi:10.1136/sextrans-2013-051184.0932

**R S Ngomoa**, <sup>2</sup>J Njoroge, <sup>1</sup>J Thiga, <sup>2</sup>C McGrath, <sup>2</sup>M H Chung, <sup>1</sup>M Attwa, <sup>2</sup>N Yatchi. <sup>1</sup>Coptic Hope Center for Infectious Diseases, Nairobi, Kenya; <sup>2</sup>University of Washington, Seattle, WA, United States

**Background** Disclosure of HIV status can influence clinical outcomes. Disclosure leads to social support, improved adherence and positive living which may affect immune reconstitution. Data on the effect of disclosure on immune reconstitution is limited. The objective of this study was to assess the effect of partner disclosure at ART initiation on immune reconstitution.

**Methods** A retrospective cohort study was done among adults with a spouse/steady partner, initiating ART within 3 months of enrollment at Coptic Hope Center between January 2009 and June 2010. Immune reconstitution was defined as 30% increase in CD4 count (cells/mm<sup>3</sup>) following ART, and disclosure as self-reported disclosure of HIV status to spouse/steady partner at ART initiation. Data was obtained from patient records collected routinely for clinical care. The association between disclosure and immune reconstitution was assessed using Kaplan-Meier survival curve and multivariate Cox proportional hazards model adjusted for covariates univariately associated with immune reconstitution ( $P \leq 0.10$ ).

**Results** Among 543 clients initiating ART within 3 months of enrollment, 467 (86%) had disclosed their status to their spouses/steady partner. Median CD4 count at disclosure was 143 cells/mm<sup>3</sup>. At month 12, 68% of those who had disclosed had attained immune reconstitution compared to 48% of those who had not disclosed. By 24 months, 80% of adults in the disclosed group had reconstituted their immune status compared to 60% of those who had not disclosed. Adults with higher baseline CD4 count were less likely to attain immune reconstitution while adults who had disclosed their status to their spouse/steady partner were 63% more likely to attain immune reconstitution compared to those who had not disclosed ( $p < 0.05$ ). There was a trend that higher education was associated with immune reconstitution.

**Conclusions** Disclosure at ART was significantly associated with immune reconstitution. HIV disclosure status may be essential in improving the clinical outcomes of clients.

**P4.035 DRUG USE AND STI IN A DUTCH COHORT OF SWINGERS**

doi:10.1136/sextrans-2013-051184.0933

**L W L Spauwen**, <sup>1,2</sup>A M Niekamp, <sup>1,2</sup>C J P A Hoebe, <sup>1,2</sup>N H T M Dukers-Muijers. <sup>1</sup>Department of Sexual Health, Infectious Diseases and Environmental Health, South Limburg Public Health Service, Geleen, The Netherlands; <sup>2</sup>Department of Medical Microbiology, School of Public Health and Primary Care (CAPHRI), Maastricht University Medical Centre (MUMC+), Maastricht, The Netherlands

**Background** Recently, swingers are classified as an emerging high-risk group for STI. A well excepted explanation is that swingers have multiple sex partners, concurrent partnerships and engage in high risk behaviour enabling rapid spread of STI. The present study assessed the prevalence of drug use while swinging and the contribution of drug use to STI risk.

**Methods** In our cohort study we included couples who self identified as swingers and visited the STI clinic in Limburg (2009–2012). Swingers (median age 45 years) filled in a self administered questionnaire to assess their sexual and drug use behaviour in the past 6 months. Using chi-square test associations with drug use were assessed.

**Results** Of 294 swingers, 49% were female, 48% (n = 140) (49% in men; 46% in women) reported drug use (other than alcohol or erectile dysfunction drugs) while swinging.

Top 5 drugs used were laughing gas (87%), XTC (86%), GHB (79%), cannabis (60%) and poppers (33%). Overall, alcohol was used by 46%. Of men 63% and of women 6% used erectile dysfunction drugs of which Camagra was most reported. Multiple drug use was reported by 90% of the users. Most common combinations include GHB and XTC (67%), XTC and erectile dysfunction drugs (38%), and alcohol and erectile dysfunction drugs (29%). Multiple drug use was associated with low education, swinging at home party's, swinging more than 2 years, swinging more than 4 times in the last 6 months, more than 5 partners and group sex. Assessment of association with STI is ongoing.

**Conclusion** Prevalence of drug use in swingers is high. It has been shown that drug use is associated with increased high risk sexual behaviour in different groups and we show this is also the case in swingers who use multiple drugs. Whether drug use is associated with STI will be determined.

**P4.036 CONDOM USE AMONG FEMALE SEX WORKERS (FSWS) INCREASED THROUGH DROP IN CENTER (DIC) BASED SERVICE DELIVERY APPROACH IN BANGLADESH**

doi:10.1136/sextrans-2013-051184.0934

**Z Hossain**, <sup>1</sup>F Sultana, <sup>1</sup>M Amin, <sup>2</sup>Y Siddiqua. <sup>1</sup>HIV Program, Save the Children in Bangladesh, Dhaka, Bangladesh; <sup>2</sup>Ac Nielsen, Bangladesh, Dhaka, Bangladesh

**Background** The HIV prevalence in Bangladesh remains low (< 1%) among FSWs. Since June 2008, with the funding supports from the Global Fund, Save the Children gradually scaled up essential services for approximately 28,600 FSWs in 51 districts through 100 Drop in Centers and 10 outreach offices. DICs provide FSWs with behavioural change education, free condoms, STI & general health service and effective referral services including voluntary counselling and testing (VCT) and maternal & child health (MCH) services. Through the programme, a total of 28,712,708 condoms were distributed among FSWs for free and 37,318,497 condoms were purchased by FSWs through social marketing.

**Methods** The Midterm Survey, 2012, a cross sectional study was conducted using robust multifarious analytical tools (both advanced quantitative and qualitative techniques) to assess the progress made by the Rolling Continuation Channel (RCC), Phase-I (Dec'09-Nov'12) implemented by Save the Children. A total of 1,729 FSWs (street, hotel and residence based) were interviewed for the survey.

**Results** Overall, 85% FSWs had regular clients during the most recent week. Among them, 93% reported condom use during the last sex act with the client. on the other hand 77% of had new clients in last week among them, 93% reported use of condom during the last sex act with their new client. Combining all together, condom use rate has increased from 66.7% (Source: UNGASS Country Progress Report, 2008) to 95.5% in the Midterm Survey, 2012.

**Conclusion** Condom use is vital to prevent HIV among FSWs. Although condom use rate is high among the FSWs, strong motivational activities including peer education should be continued for the FSWs to keep the current condom use rate.

**P4.037 USE OF CELL PHONE DIARIES TO UNDERSTAND RISK CONTEXTS OF SEXUAL EVENTS AMONG FEMALE SEX WORKERS**

doi:10.1136/sextrans-2013-051184.0935

<sup>1</sup>A M Roth, <sup>2</sup>D J Hensel, <sup>2</sup>J Gunn, <sup>2</sup>J D Fortenberry, <sup>1</sup>R Garfein, <sup>2</sup>J N Arno, <sup>2</sup>S E Wiehe. <sup>1</sup>University of California San Diego, La Jolla, CA, United States; <sup>2</sup>Indiana University, Indianapolis, IN, United States

**Background** Data collection using mobile technologies, such as cell phones, allows more frequent and real-time data collection and is less prone to recall bias. We describe the feasibility of using twice daily cell

phone diaries to capture contextual features of STI/HIV-risk that could impact disease acquisition among female sex workers (FSW).

**Methods** Women engaging in transactional sex in the prior 90 days were recruited utilising incentivized snowball sampling. Participants completed STI testing and baseline/exit surveys. Over 4-weeks, they completed twice-daily electronic diaries assessing event-level sexual behaviour, condom use, and drug use. Weekly in-person interviews used open-ended questions to explore geographical characteristics of sexual encounter locations as well as acceptability of event-level monitoring.

**Results** 25/26 participants (median age 43.5 years) completed the 4-week study. At baseline, 27% tested positive for a STI. Participants completed 84.5% of 1,518 expected surveys and 95% of 106 expected interviews. Patterns of diary compliance were stable over time. Partnered sexual activity was captured in 21.4% of diaries. At the participant-level, most reported giving oral sex (84.7%) or vaginal sex (96.1%); fewer (19.2%) reported engaging in anal sex. Among women reporting partnered sexual behaviour with any partner type (i.e., new/regular customers, romantic partners), using condoms was reported 39.2%, 45.5% and 83.3% of the time for giving oral sex, vaginal sex, and anal sex respectively. At the event-level, the frequency of giving oral sex, vaginal sex or anal sex did not significantly change over time.

**Conclusions** It is feasible to engage and retain FSW in a technologically-advanced study to characterise risk contexts of sexual events. Adherence to study protocol was high indicating event-level monitoring using cell phone based diaries is acceptable. These data can be utilised to improve our understanding of the individual, relational and environmental factors that influence STI/HIV acquisition among FSW.

**P4.038 AN ENVIRONMENTAL AND POLITICAL ECONOMIC PERSPECTIVE ON SEXUAL RISK: TEAHOUSES, FEMALE SEX WORK AND PEER ETHNOGRAPHY IN ZIGONG, SOUTH WEST CHINA**

doi:10.1136/sextrans-2013-051184.0936

**R Lorway**, <sup>2</sup>J Zhang, <sup>3</sup>X Ma, <sup>3</sup>Q Li, <sup>3</sup>Y Xie, <sup>1</sup>S Khan, <sup>1</sup>J F Blanchard, <sup>1</sup>B Yu. <sup>1</sup>University of Manitoba, Winnipeg, MB, Canada; <sup>2</sup>Sichuan University, Chengdu, China; <sup>3</sup>Zigong Center for Disease Control and Prevention, Zigong, China

**Background** In Sichuan province, the criminalised status of female sex work, coupled with the mobility of female sex workers (FSWs), poses major challenges to gathering information about the organisation of the sex trade.

**Objectives** This study has 2 main objectives: (1) To document the environmental risk factors in sex work venues; (2) To describe the sex trade industry in relation to political economic factors, including broader economic transformations.

**Methods** We trained 3 FSWs to conduct participant observation and ethnographic field note writing, including “thick descriptions” (the peeling back of multiple layers of meaning during observations of social scenes). These observations were conducted in 9 sex work venues representing previously mapped FSW venues. Findings were contextualised with secondary historical sources.

**Findings** Participant observation revealed that FSWs were independent when choosing where they worked and when they shifted to another work site. However, gender power inequalities between sex workers and their clients were also described. These power relationships are tied to structural factors that converge in small urban spaces. Teahouses, for example, have a long history that brings together entertainment, leisure, business and politics. In recent decades, there has been a resurgence of leisure and entertainment venues in Sichuan province in the Dengist era of economic liberalisation. Teahouses, are therefore part of a wider proliferation of small leisure spaces in urban milieus that allow (mostly) men from a

variety of backgrounds to enjoy pleasure and “recapture” ideas of freedom that were suppressed under the Maoist regime. For women working in these spaces, however, the unequal social relations they encounter reflect the limited opportunities that women more generally encounter in post-socialist China.

**Conclusion** Any intervention that seeks to reduce risk behaviours in sex work venues must account for how sexual risk practises and vulnerabilities are rooted in larger political economic realities.

**P4.039 HIV-POSITIVE CLIENT REPRODUCTIVE DESIRES AND HEALTH CARE PROVIDER PERSPECTIVES OF PREGNANCY IN HIV-POSITIVE WOMEN IN ETHEKWINI DISTRICT, KWAZULU-NATAL, SOUTH AFRICA**

doi:10.1136/sextrans-2013-051184.0937

**C Milford**, R Greener, J Pienaar, M Bekinska, L Rambally, M Drace, K Sithole, Z Mabude, J Smit. *MatCH (Maternal, Adolescent & Child Health), University of the Witwatersrand, Overport, Durban, South Africa*

**Background** The Province of KwaZulu-Natal, South Africa has among the highest concentrations of people living with HIV. However, with improved access to ARVs and PMTCT, PLWHIV are now able to have children with minimal risk. There is therefore a need to explore current fertility and contraceptive desires of this population to ensure appropriate and accessible sexual and reproductive health (SRH) counselling.

**Methods** Baseline and Endline surveys were conducted in 2009 and 2011 with providers and clients at seven healthcare facilities, before and after the implementation of a SRH service integration model, in eThekweni District. HIV-positive clients' fertility intentions, contraceptive use and providers' perceptions of pregnancies among HIV-positive women were explored. Descriptive statistics were generated using SPSS.

**Results** At baseline 46 providers and 86 HIV-positive clients (14 male, 72 female) and at endline 44 providers and 144 HIV-positive clients (43 male, 101 female) were interviewed. 18.6% and 38% of clients at baseline and endline, respectively, wanted more children. At baseline and endline, females with HIV-positive partners were less likely than those with HIV-negative partners to want more children. Concerns about the health of the baby and self were common reasons for not wanting more children. At baseline, of those who wanted children, half the women and all men were using contraception. At endline, 80% of women and 72% of men who wanted children were using contraception. Male condoms were the most common contraceptive used. At baseline, 43% of providers thought healthy HIV-positive women could consider having children, compared with 66% at endline.

**Conclusion** There is a need for reproductive choices and family planning to be integrated with HIV services. Comprehensive policies and programmes should be developed to address SRH counselling needs of HIV-positive men and women, and address the values and training needs of providers.

**P4.040 STUDY TO EXPLORE THE SEXUAL BEHAVIOUR AND PRACTISES, AND DRUG USE PATTERN AMONG FEMALE INJECTING DRUG USERS IN SIKKIM**

doi:10.1136/sextrans-2013-051184.0938

**R Basu**, N Panda, A RoyChowdhury, R Kr Sonkar, S Das Konar, S Chowdhury, M Kundu, R Das. *CINI, Kolkata, India*

**Background** North East of India is a hub of Drug Use activities (NACO 2007). Although the government has specific programme to reduce the risks and vulnerabilities of Injecting Drug Users and cater to their health needs, it focuses on the male IDUs, ignoring the vulnerabilities of Female Injecting Drug Users; not recognising their