

Conclusion Despite personal experience with HIV, risky sexual behaviours and STI prevalence remain a problem in persons living with HIV in the capital city of Nicaragua. In order to prevent reinfection between serodiscordant partners as well as continued STI transmission, it is important for STI prevention programs to continue to develop their sexual health services, focusing on improved condom access and promotion.

P1-S5.12 **POPULATION ATTRIBUTABLE RISK FOR CHLAMYDIA INFECTION IN A COHORT OF YOUNG INTERNATIONAL TRAVELLERS (BACKPACKERS) AND RESIDENTS IN AUSTRALIA**

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Aim To estimate the population attributable risk (PAR) for *Chlamydia trachomatis* infection in young men and women in Sydney, Australia.

Method Multivariate logistic regression was used to examine the association between demographic, sexual behaviour and other potential risk factors on chlamydia positivity in young (≤ 30 years) heterosexual international travellers (backpackers) and Australian residents attending a sexual health clinic. Point and interval estimates of PAR were calculated to quantify the proportion of chlamydia infections that can theoretically be prevented if a combination of risk factors is eliminated from a target population.

Results In males, the PAR associated with inconsistent condom use in the past 3 months was 65% (95% CI 56 to 71%) in backpackers compared to 50% (95% CI 41 to 56%) in non-backpackers and the PAR associated with reporting three or more female sexual partners in the past 3 months was similar between male backpackers and non-backpackers; 33% (95% CI 28 to 40%) and 36% (95% CI 32 to 41%), respectively. In females, the PAR associated with inconsistent condom use in the past 3 months was 51% (95% CI 42 to 59%) in backpackers compared to 41% (95% CI 31 to 51%) in non-backpackers, and the PAR associated with reporting three or more male sexual partners in the past 3 months was 14% (95% CI 11 to 18%) in backpackers compared to 30% (95% CI 25 to 37%) in non-backpackers.

Conclusion These findings suggest that the largest number of chlamydia infections could be avoided by increasing condom use, particularly in backpackers. Reporting multiple partners was also associated with a large proportion of infections and the risk associated with this behaviour should be included in health promotion strategies.

P1-S5.13 **RECREATIONAL DRUG USE DURING SEX IS ASSOCIATED WITH STI AMONG CLIENTS OF A LARGE STI OUTPATIENT CLINIC IN AMSTERDAM, THE NETHERLANDS**

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Background Previous studies have shown that recreational drug use is associated with high-risk sexual behaviour and STI. Little is known about the relationship between the use of specific recreational drugs during sex, sexual behaviour and the risk for any STI (chlamydia (CT), gonorrhoea (NG) and/or syphilis) or the three

STI separately in heterosexual men, men having sex with men (MSM) and women. We assessed the prevalence of recreational drug use during sex, and associations of drug use during sex with high-risk sexual behaviour and STI.

Methods Attendees of the STI clinic of the Public Health Service of Amsterdam were interviewed during three waves of a bi-annual anonymous survey (2008–2009) about sexual behaviour in the preceding 6 months (number of steady and casual sex partners, condom use during vaginal or anal sex) and specific recreational drug use just before or during sex in the preceding 6 months (cannabis, XTC, poppers, heroine, cocaine, GHB, apomorfine, amphetamine, methylamphetamine, mushrooms, ketamine and explosion). Participants were tested for CT, NG and syphilis. Associations between drug use during sex and high-risk sexual behaviour and STI were analysed using multivariable logistic regression analyses. Analyses were done separately for heterosexual men, men who have sex with men (MSM) and women.

Results In total, 1012 heterosexual men, 749 MSM and 1254 women participated in this study. Of these, 11.7% had CT, 3.5% NG and 1.4% syphilis. Recreational drug use during sex in the previous 6 months was reported by 22.5% of heterosexual men, 52.7% of MSM and 15.6% of women. In all three groups, drug use during sex was associated with unprotected vaginal and anal sex and more casual sex partners. In multivariable analyses among MSM, adjusting for age, ethnicity, educational level and sexual behaviour, poppers use was associated with any STI (adjOR 1.8, 95% CI 1.2 to 2.6) and with NG (adjOR 2.6, 95% CI 1.6 to 4.2), and GHB use with syphilis (adjOR 2.3, 95% CI 1.0 to 5.0). In multivariable analyses among women, GHB use was associated with any STI (adjOR 4.7, 95% CI 1.8 to 12.2) and CT (adjOR 3.5, 95% CI 1.1 to 11.4). In heterosexual men, drug use during sex was not associated with STI.

Conclusions STI clinic clients frequently report recreational drug use during sex and this is associated with high-risk sexual behaviour in heterosexual men, MSM and women. The use of drugs during sex is associated with STI in MSM and women, but not in heterosexual men.

P1-S5.14 **RISK FACTORS ASSOCIATED WITH HIV ACQUISITION: A COMPARATIVE ANALYSIS OF OLDER AND YOUNGER WOMEN WHO PARTICIPATED IN THE MDP301 TRIAL IN JOHANNESBURG**

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Background Young women are known to be particularly at risk for HIV infection. Identifying characteristics associated with HIV-acquisition in younger and older women could assist with developing effective interventions which target the determinants of HIV.

Methods The MDP301 study was an international, multi-centre, randomised controlled trial to assess the efficacy of 0.5% PRO2000/05 microbicide gel. 2508 HIV-negative women, ≥ 18 years, were enrolled in Soweto and Orange Farm and followed up for 12 months. Associations between baseline demographic, behavioural and clinical risk factors and HIV acquisition were assessed using univariate Poisson regression.

Results Data on 2451 women were analysed. 110 seroconversions were observed over 2356.5 woman-years (wy). Overall, HIV incidence was 46.7/1000 wy (95% CI 38.7 to 56.3). Younger women (18–24 years) were more likely to acquire HIV (IRR 1.4, 95% CI 1.0 to 2.0) than older women (≥ 25 years). Difficulty accessing money for medical treatment (IRR 1.5, 95% CI 0.06 to 2.0, $p=0.019$)