

commonly made in certain types of popular music and dance among black Caribbeans, changing norms of relationships in an era where you can “order sex via app”, peer pressure, and a normalisation of concurrency on social media, especially among men.

Conclusion Among black Caribbeans, the different types and contexts of concurrent partnerships can have implications for STI prevention. Awareness of being in a concurrent partnership could potentially facilitate uptake of interventions including condom use, partner notification, and reduce the risk of re-infection. In addition, such interventions should address broader sociocultural factors influencing risk behaviour including the impact of media.

P4.22 CROSSING THE BRIDGE: EXPLORING SEXUAL RISK PROFILES OF MEN WHO HAVE SEX WITH MEN ATTENDING A SEX ON PREMISES VENUE AND A PUBLIC SEXUAL HEALTH CLINIC FOR STI SCREENING IN SYDNEY, AUSTRALIA

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Introduction In Australia, men who have sex with men (MSM) are targeted to curb the spread of HIV and STIs. ‘Non-gay’ identifying MSM (NGMSM) may not identify with health messages, impacting knowledge of HIV/STI harm minimisation and result in poorer health-seeking behaviours. NGMSM and other men who have sex with men and women are often hidden to clinical services. These men may act as bridges for HIV/STI transmission to female partners. Novel strategies to reach this group include opportunistic HIV/STI screening at sex on premises venues (SOPV). We compared the demographics, testing and sexual behaviour of MSM attending a SOPV to MSM attending an established sexual health clinic (SHC).

Method A daytime SOPV HIV/STI screening service was conducted 2–3 consecutive days per month from November 2015 for 12 months. All patrons were offered testing. The comparison group were MSM attending a local SHC for screening the week following each SOPV clinic. The SHC operates weekdays with appointment and walk-in options. At both sites, participants consented to provide demographic information, contact details and a brief sexual history. Demographics, sexual behaviour and testing practices were compared between the 2 groups.

Results During the study period 84 men tested at the SOPV and 108 at the SHC. SOPV testers were older (mean age, 48.4 years. vs 34.6 years.; $p < 0.001$) and were more likely to have had sex with a female in the past 12 months (49/84, 58% vs. 19/105, 18%; $p < 0.001$). Compared with SHC testers, more SOPV testers had never had an HIV test (23/84, 27% vs. 12/108, 11%; $p < 0.01$). In the previous 3 months, 100% condom use with regular partners was similar in both groups (SOPV 33/84, 39% vs. SHC 37/105, 35%; $p = 0.67$).

Conclusion Inconsistent condom use with casual and regular sex partners, combined with higher reported rates of sex with females, may enable SOPV testers to act as bridges for STI/HIV transmission between MSM and heterosexual populations. Our findings have implications for HIV/STI service provision, contact tracing and local health promotion initiatives.

P4.23 EGOCENTRIC SEXUAL NETWORK CHARACTERISTICS OF MEN WHO HAVE SEX WITH MEN (MSM) AND TRANSGENDER WOMEN (TW) RECENTLY DIAGNOSED WITH SYPHILIS AND/OR GONORRHOEA/CHLAMYDIA (GC/CT) IN LIMA, PERU: NETWORK PATTERNS AS ROADMAPS FOR STI PREVENTION INTERVENTIONS

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Introduction Endemic rates of STIs like GC/CT and syphilis in Peru are only partially explained by individual behavioural or biological factors. Characterisation of sexual networks of MSM/TW with syphilis and/or GC/CT can provide critical data to inform prevention efforts.

Methods We enrolled 917 MSM/TW as screening for 2 STI control trials in Lima, Peru. We surveyed demographics and sexual identity, role, and 30 day network characteristics (number/gender of sexual partners, partner types, and frequency of anal/vaginal intercourse) and tested for syphilis (RPR >1:16) and oral, rectal, or urethral GC/CT (TMA). Differences in egocentric network characteristics were analysed with Chi-square and Kruskal-Wallis tests.

Results Approximately 38.7% ($n = 355$) of subjects had a new STI diagnosis (Syphilis: 97 [10.6%]; GC/CT: 161 [17.6%]; Syphilis-GC/CT Co-infection: 49 [5.3%]). MSM/TW with GC/CT were younger (median age+IQR: 25 [22–30]) than those with syphilis (28 [23–34]) or no STI (28 [24–35]). STI-negative subjects were more likely to identify their sexual role as *activo* (insertive; 24.8%) than men with syphilis (10.8%) or GC/CT (14.7%). MSM/TW with GC/CT reported greater median numbers of all partners (3 [2–5]) and of casual male or transgender partners (2 [0–4]) than those with syphilis (2 [1–5] and 1 [0–2], respectively) or no STI (2 [1–3] and 1 [0–2]). Both GC/CT and syphilis were associated with the number of partnerships involving receptive anal intercourse (RAI; 2 [1–4] and 2 [1–13]) compared with STI-uninfected subjects (1 [0–2]). No differences were noted in the number of partnerships with condomless RAI or number of female partners.

Conclusion Egocentric network characteristics of MSM/TW with GC/CT and/or syphilis demonstrated progressive increases in network size, number of casual partners, and frequency of RAI when comparing no infection vs. syphilis vs. GC/CT +/- syphilis co-infection. Detailed understanding of network patterns, along with individual and partnership characteristics, will inform public health responses to HIV/STIs among Latin American MS.

P4.24 SWIPE LEFT ON DISEASE: THE EFFECTS OF CONTEXTUAL FACTORS AND DATING APP USAGE ON SEXUAL RISK BEHAVIOURSAMONG YOUNG ADULTS

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Introduction With the rise of social media and smartphones, millennials increasingly report meeting their romantic partners through mobile dating apps. Yet there is concern that this may also be the reason behind increases in sexually

transmitted infection (STI) rates among young adults. This study examines whether contextual factors affect young adults' perceived STI risk and engagement in sexual risk behaviours. In addition, we compare sexual histories among app users and non-users.

Methods We recruited our sample from 111 college Facebook groups over a 10 week period. Participants were presented with 1 of 32 scenarios varying in levels of perceived risk. They answered questions pertaining to relationship status, dating app and sexual experience, condom usage, and STI testing experience.

Results A total of 4429 eligible participants between the ages of 18–24 completed the survey. Participants were more likely to believe that their partner had a greater number of sexual partners and engaged in casual sex if the scenario involved either a male partner, perceived high-risk location, or one-night stand. They were more likely to enforce condom usage if their partner was male. Lastly, they were more likely to ask about their partner's STI status if the scenario involved a male partner or one-month dating. Among sexually active participants, dating app usage was associated with sexual experience and having casual relationships, more sexual partners, higher perceived STI risk, and STI testing. While over half of the sexually active participants had inconsistent condom usage and had not been tested for STIs, they generally reported low perceived STI risk.

Conclusion Dating app users are more likely to engage in sexual risk behaviours and to have had STI testing. For these reasons, dating apps can be a useful platform for increasing STI knowledge and reducing the incidence of STIs among their users.

P4.25 IMPROVING EFFICACY OF THE HIV RESPONSE THROUGH INTEGRATED FAMILY SERVICES: A MICRO-SIMULATION

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Introduction With antiretroviral treatment more commonly available there is a gradual shift in the response to HIV from the emergency response to the management of a chronic condition. This requires that we shift our approach not only to treatment, but also to prevention and the protection of affected children. We examine through micro-simulation modelling the potential benefits of more highly integrated responses.

Methods Using South African data we undertake household level micro-simulation modelling examining the dynamic relationship between adult incidence, access to treatment and treatment adherence, and the long term impact on children, including in ways which increase their risk of HIV infection as adults. We simulate a cohort of women born in 1985 examining the consequences of the South African context for their and their children's survival and their children's HIV risk profile.

Results In the South African context over 35% of children will be affected by maternal HIV. This leads to lower rates of school completion (12 percentage points) and higher rates of adolescent mental health issues (10 percentage points). Both of these outcomes have been linked to HIV risk behaviours.

The results are highly sensitive to adult treatment uptake and adherence, as both affect the timing of adult illness and death.

Conclusion The study highlights the links between adult and child outcomes, not only in terms of negative developmental outcomes for children, but in terms of the epidemics replications. This suggests the need to, when appropriate, treat the family as a unit and focus on addressing common household challenges to adult adherence and adolescent risk behaviour. The results suggest that the current silo approach, common in much of Africa, is economically inefficient.

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P4.26 COULD DIFFERENCES IN IMPLICIT ATTITUDES TO SEXUAL CONCURRENCY PLAY A ROLE IN GENERALISED HIV EPIDEMICS?

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Introduction High rates of sexual partner concurrency have been shown to facilitate the spread of various sexually transmitted infections. Assessments of explicit attitudes to concurrency have however found little difference between populations. We developed a concurrency implicit associations test (C-IAT) to assess if implicit attitudes towards concurrency may vary between individuals and populations and what the correlates of these variations are.

Methods We recruited 869 Belgian (mean age 22.9, SD 5.1) and 70 South African (mean age 22.1, SD 2.5) university students to complete the C-IAT together with a questionnaire concerning sexual behaviour and explicit attitudes to concurrency.

Results The Belgian students C-IATs demonstrated a strong preference for monogamy (-0.78 , $SD=0.41$), with 93.2% of participants having a pro-monogamy C-IAT. The South Africans' C-IAT demonstrated little preference for concurrency or monogamy (-0.009 , $SD=0.43$), with 34.7% having a pro-monogamy C-IAT ($p<0.0001$). The South Africans also reported more concurrent sexual behaviour than the Belgians. At a population- but not an individual-level, the C-IAT was a better predictor of actual concurrent behaviour than explicit norms towards concurrency.

Conclusion We found larger differences in implicit than explicit attitudes towards concurrency between populations. These findings need to be replicated in larger samples.

P4.27 HEALTHCARE ACCESS AND ANTIBIOTIC USE FOR GENITOURINARY SYMPTOMS AMONG FEMALE SEX WORKERS IN TIJUANA MEXICO

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