

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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10.1136/sextrans-2017-053264.522

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.

Funding for this study was provided by USAID through Management Sciences for Health.

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

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10.1136/sextrans-2017-053264.523

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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10.1136/sextrans-2017-053264.524