



Abstract P1-S5.39 Figure 1 Infection Status.

18% to 13% for ages 21–25, 26–30, and 31–35 respectively, whereas women in each age group were equally distributed between 16% and 18%. Women, MSW, and MSM, accounted for 31%, 32% and 30% respectively of cases; 7% were bisexual men. Though most heterosexuals had only syphilis, 16% were HIV+ and 38% of them were coinfected. Among 196 bisexual and MSM, 73% were HIV+; of these, half were coinfected. On the basis of timing of HIV and syphilis diagnoses and syphilis stage, an estimated 33% of HIV+ men may have serosorted. Unlike other MSM populations, these cases did not use methamphetamine; 35% reported marijuana use. Crack cocaine use was reported for 16% of MSW and 33% of women. A total of 2099 individuals (cases, uninfected contacts, and anonymous partners) made up the network divided into 293 components. The largest component of 261 people (Abstract P1-S5.39 figure 1) was predominantly MSM including 10 of the 36 MSMW. None of MSMWs' female partners had other partners, suggesting that onward transmission did not occur. Heterosexuals, engaging in transactional sex, comprised the second largest component involving at least 135 individuals; all cases were syphilis-infected.

Conclusions Contemporaneous syphilis and HIV epidemics persist among MSM; neither serosorting nor methamphetamine use fuels spread. Heterosexuals experienced a syphilis outbreak driven in part by transactional sex and crack cocaine use. Bisexual men did not bridge the populations. Frequent dual screening among MSM is critical to impede further transmission of both STIs.

P1-S5.40 **SEX CELLS: A PILOT STUDY INVESTIGATING CELL PHONE-BASED SEXUAL NETWORKS AMONG MEN WHO HAVE SEX WITH MEN IN SOUTH INDIA**

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Background A high HIV prevalence (19–32%) has been reported among men who have sex with men (MSM) in South India. Indeed, sexual networks play a central role in the spread of HIV in these communities but have rarely been studied because of intense social

stigma and methodological and ethical challenges. Although cell phones are commonly used among MSM to contact sexual partners in India, few studies have explored the formation of such sexual networks. This study sought to understand the structure, context and evolution of cell phone-based sexual networks of MSM in three South Indian cities.

Methods Sampling frames in the three cities were established using MSM contacts stored in the cell phones of community-based researchers (CBRs). Study participant “seeds” were randomly selected from these social networks. Seeds were asked to recruit their sexual partners, who completed surveys about their sexual practices with regular partners and 7-day partners. Network diagrams were constructed using non-nominal codes linking study participants.

Results Cell phone contacts represent a useful resource for constructing social networks. Preliminary results indicate the diversity of sexual networks and sexual practices within these networks.

Conclusions New community-based methods of exploring sexual networks were assessed, and sexual practices, partner concurrency, and risk behaviours were explored. This information can be used to tailor more specific services for MSM in these communities. As this methodology sampled from social networks, more hidden “individuals who do not access health services were included in the study.”

P1-S5.41 **QUANTIFYING THE CONTRIBUTION OF RE-INFECTION WITHIN PARTNERSHIPS TO PERSISTENT SPREAD OF CHLAMYDIA**

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Background Many studies show that people testing positive and treated for genital chlamydia infection are at high risk of a repeat infection in the first year after treatment. Repeat infection can come from treatment failure, a new partner, or from within an existing partnership if the partner was not treated. Partnerships can therefore form a reservoir of chlamydia infections that might affect the effectiveness of population screening programs. It is not known how