

8.8% and those among general MSM were 17.2%, 8.9% and 4.6%, respectively. Compared with general MSM, MB had significantly higher prevalence of syphilis, HIV, and syphilis-HIV co-infection. In the multivariate logistic regression analysis, MSM aged greater than 30 years, having college or above education level, residing in Shenzhen for 0.5–3.0 years and greater than 3.0 years were less likely to serve as MB in comparison with those aged less than 30 years, having high school or below education level, residing in Shenzhen for less than 0.5 years. Monthly income more than 5000 Yuan, having drug abuse history, ever being clients of MB, ever reported both insertive and receptive anal sex behaviours will increase the risk of serving as MB among MSM in comparison with monthly income less than 3000 Yuan, never having drug abuse, never being clients of MB and ever reported predominantly insertive anal sex behaviours.

Conclusion Various factors were associated with MSM serving as MB and needed to be considered when designing syphilis/HIV prevention programs targeted them.

P3.97 A SCOPING REVIEW OF PREVALENCE, INCIDENCE AND RISK FACTORS FOR HIV INFECTION AMONGST YOUNG PEOPLE IN BRAZIL

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Introduction Despite young people being a key population for HIV prevention, the HIV epidemic amongst young Brazilians is perceived to be growing. We therefore reviewed all published literature on HIV prevalence and risk factors for HIV infection amongst 10–25 year olds in Brazil.

Methods We searched Embase, LILACS, PsycINFO, PubMed and Web of Science for studies published up to May 2015 and analysed reference lists of relevant studies. We included peer-reviewed studies from any time in the HIV epidemic which provided estimates specific to ages 10–25 (or some subset of this age range) for Brazilians on either: (a) HIV prevalence or incidence; or (b) the association between HIV and socio-demographic or behavioural risk factors.

Results 37 studies in 36 publications met the inclusion criteria: 33 cross-sectional, two case-control, two cohort. Three studies analysed national data. 31 studies provided HIV prevalence estimates, largely for six population subgroups: Counselling and Testing Centre attendees; blood donors; pregnant women; institutional individuals; men-who-have-sex-with-men (MSM) and female sex workers (FSW); two provided HIV incidence estimates. Ten studies showed HIV status to be associated with a wide range of risk factors, including age, sexual and reproductive history, infection history, substance use, geography, marital status, mental health and socioeconomic status.

Conclusion Few published studies have examined HIV amongst young people in Brazil, and those published have been largely cross-sectional and focused on traditional risk groups and the south of the country. Despite these limitations, the literature shows raised HIV prevalence amongst MSM and FSW, as well as amongst those using drugs. Time trends are harder to identify, although rates appear to be falling for pregnant women, possibly reversing an earlier de-masculinization of the epidemic. Improved

surveillance of HIV incidence, prevalence and risk factors is a key component of efforts to eliminate HIV in Brazil.

P3.98 SYPHILIS PREVALENCE AND HIV CO-INFECTION AMONGST MEN WHO HAVE SEX WITH MEN (MSM) IN SAO PAULO, 2011 AND 2016

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Introduction Syphilis infection rates began an upward trend in the late 1990s, disproportionately affecting men who have sex with men (MSM). Many of these MSM were co-infected with Human Immunodeficiency Virus (HIV). Co-infection often results in a significantly higher burden of disease. Little data examine the prevalence of syphilis in Brazil, the largest country of Southern America. The purpose of this study is to examine disease prevalence and rates of syphilis and HIV co-infection among MSM in São Paulo, the most populous city in Brazil.

Methods This study analyses data from two separate surveys. The first study recruited 771 MSM at randomly selected venues where MSM congregate using time-location sampling (TLS) in 2011. HIV testing was done with all MSM in the field; Syphilis testing was done on a sub-sample of MSM (n=227) who presented to a specialty clinic for screening. The second study recruited MSM by peer referral through respondent-driven sampling (RDS) in 2016. All participants (n=338) were tested for HIV and syphilis. RDS and TLS weights were used in the analysis to provide data representative of the population of interest.

Results In 2011, 19.8% (CI 13.5–28.1) of MSM were positive for syphilis and 14.7% (CI 9.2–22.7) were positive for HIV, particularly affecting people within 35–49 years (representing 37% and 35% of the syphilis and HIV positive results, respectively). Among the MSM living with HIV, co-infection with syphilis was 45%. In 2016, 30.67% (CI 21.8–39.5) of MSM were positive for syphilis and 23.0% (CI 13.17–32.9) were positive for HIV. In the MSM living with HIV, 48% tested positive for syphilis. In a Poisson regression, the risk for HIV and Syphilis is higher for 2016.

Conclusion HIV and Syphilis prevalences are at high levels among MSM sampled in São Paulo. An alarming majority of MSM with HIV tested positive for syphilis in 2016. Interventions promoting frequent STI screening among HIV-positive and negative MSM are needed to address both epidemics and mitigate the adverse health outcomes of co-infection and to prevent onward transmission.

P3.99 IDENTIFYING VARIABILITY IN HIV AND SYPHILIS TRANSMISSION RISK IN MSM SEX PARTNER MEETING PLACES

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