

Methods From January 2010 to November 2012, all females and MSM were routinely tested for anorectal, oropharyngeal and urogenital *Chlamydia trachomatis* (Ct) and *Neisseria gonorrhoeae* (Ng). Data were collected on demographics and sexual behaviour.

Results The study population comprised 4829 consults. Overall Ct positivity was 6.8% (131/1937) in females and 10.0% (289/2892) in MSM, for Ng this was 4.3% (n = 83) and 6.7% (n = 193) respectively. The proportion isolated anorectal Ct was 16.8% (n = 22) in females and 63.0% (n = 182) in MSM, for Ng this was 10.8% (n = 9) and 44.0% (n = 85) respectively. Combined urogenital and anorectal Ct was 45.0% (n = 59) in females and 13.5% (n = 39) in MSM, for Ng this was 19.3% (n = 16) and 11.4% (n = 22) respectively. Isolated oropharyngeal Ct was 9.9% (n = 13) in females and 5.9% (n = 17) in MSM, for Ng this was 53.0% (n = 44) and 31.6% (n = 61) respectively. Isolated urogenital Ct was 28.2% (n = 37) in females and 17.6% (n = 51) in MSM, for Ng this was 16.9% (n = 14) and 13.0% (n = 25) respectively.

Discussion Anorectal and oropharyngeal STD were often isolated and thereby not coincidentally treated with urogenital STD. Therefore urogenital testing only is insufficient. Furthermore, these isolated infections remain undiagnosed if routine anorectal/oropharyngeal testing is lacking. Combined anorectal/urogenital Ct/Ng were also highly prevalent, highlighting the importance of an effective treatment for simultaneous genital and extragenital Ct/Ng.

P3.155 ASSESSMENT OF KNOWLEDGE OF SEXUAL TRANSMITTED DISEASES (STDs) AND A SEROPREVALENCE STUDY IN GAY MAN IN KAYSERI, TURKEY

doi:10.1136/sextrans-2013-051184.0613

¹E Balci, ²M Doganay, ²H Demiraslan, ³S Gokahmetoglu. ¹Erciyes University Medical Faculty Department of Public Health, Kayseri, Turkey; ²Erciyes University Medical Faculty Department of Infectious Diseases, Kayseri, Turkey; ³Erciyes University Medical Faculty Department of Microbiology, Kayseri, Turkey

Background Homosexual behaviour is prone to many sexual transmitted diseases (STDs) and many social problems. The aim of this study is to assess the knowledge, source, the reliability and accuracy of information resources and to assess the seropositivity for some STDs.

Method A questionnaire was prepared for the STDs including these; to learn their demographic and economical characteristics, having any chronic disease or, experienced any disease, use of any illegal drug, their sense for acceptability in public, number of partner in one year, main transmission route, prevention and source of their information about this diseases in gay people. In addition these, Another questions were to learn their to join an education programme for prevention of STDs and to give blood samples for the serologic investigation against hepatitis B, hepatitis C, syphilis and HIV. Voluntary people defined himself as gay, was entered to the study.

Results The questionnaire was replied by 94 people. Mean age was 23.32 ± 4.6 year and 80.4% defined himself as gay. Of these, 72.6% was graduated from high school or university, 5.9% had a chronic disease and 3.9% had receiving any medicine. 29.4% had no any health insurance. Using one of these; cigarette, alcohol, heroin or cocaine were at percentage of 62.8, 46.8, 10.6 and 1.1 respectively. 23.4% had multiple partners and 76.7% single partners. Majority people knew the transmission of HIV/AIDS by sexual intercourse (88.3%) or blood/blood products (77.7%). 69.1% had a history of unprotected sexual relation. Major source of their knowledge about STDs was internet or other media. Blood samples could be taken from 39, one was positive for HIV. An education programme was used as a small group after questionnaire.

Conclusion This is a first basic study on homosexual group, summarising their problems in our region.

P3.156 CONTRIBUTION OF SEXUAL PRACTISES OTHER THAN ANAL SEX TO THE TRANSMISSION OF BACTERIAL SEXUALLY TRANSMITTED INFECTIONS IN MEN WHO HAVE SEX WITH MEN

doi:10.1136/sextrans-2013-051184.0614

^{1,2,3}J L Nash, ^{1,2}J S Hocking, ^{1,2}T R H Read, ^{1,2}M Y Chen, ^{1,2,3}C S Bradshaw, ^{1,2}D S Forcey, ^{1,2}C K Fairley. ¹Melbourne Sexual Health Centre, Melbourne, Australia; ²Sexual Health Unit, School of Population Health, University of Melbourne, Melbourne, Australia; ³Monash University, Melbourne, Australia

Background Syphilis, chlamydia and gonorrhoea are increasingly common amongst Australian men who have sex with men (MSM). Our objective was to quantify the proportion of cases and risk of primary syphilis (PS), urethral chlamydia (UCT) and urethral gonorrhoea (UGC) attributable to sexual practises other than anal sex.

Methods Electronic medical records for MSM who attended Melbourne Sexual Health Centre between July 2002 (for PS) or January 2006 (for UCT and UGC) and October 2012 inclusive were examined.

Results There were 37 533 eligible consultations; 2374 (6%) of these reported no anal sex. There were 204 PS diagnoses, 673 UCT diagnoses, and 618 UGC diagnoses; 12 (6%), 16 (2%) and 44 (7%) cases respectively occurred in consultations where no anal sex was reported in the previous three months (PS, UGC) or twelve months (UCT). Amongst MSM who reported no anal sex, PS was diagnosed in 0.5 cases/100 consultations, UCT was diagnosed in 1.5 cases/100 tests for UCT and UGC was diagnosed in 14 cases/100 tests for UGC. UCT was significantly more common in MSM who reported anal sex (OR 2.18, 95% CI 1.32 – 3.59, p = 0.002), but PS (p = 0.82) and UGC (p = 0.14) were not. For MSM who reported anal sex, condom use was protective for all three infections (all p ≤ 0.03).

Conclusions UCT rarely occurs in MSM due to sexual practises other than anal sex; however these practises appear to contribute significantly to the acquisition of PS and UGC. Our figures probably underestimate the risk involved, as men who have anal sex also engage in other sexual practises. The implication is that successful programmes to control sexually transmitted infections, particularly PS and UGC, will need to utilise additional strategies, such as frequent testing, as well as promoting condom use.

P3.157 INCREASING STI RATES IN YOUNG MSM IN THE NETHERLANDS, 2006–2011

doi:10.1136/sextrans-2013-051184.0615

¹F D H Koedijk, ¹B H van Benthem, ²E M D C Vrolings, ^{1,3}M A B van der Sande, ⁴On behalf of the Dutch STI clinics. ¹National Institute of Public Health and the Environment, Bilthoven, The Netherlands; ²STI AIDS The Netherlands, Amsterdam, The Netherlands; ³Julius Center for Health Sciences and Primary Care, University Medical Centre Utrecht, Utrecht, The Netherlands; ⁴A van Daal (East), AP van Leeuwen (North-Holland Flevoland), F de Groot (North), CJA Hoebe (Limburg), M Langevoort (Utrecht), AM van Camerijk (South-Holland North), J van de Sande (Zeeland-Brabant), V Wieërs (South-Holland South), Bilthoven, The Netherlands

Objective Young men having sex with men (MSM) are a high-risk group involved in on-going transmission of sexually transmitted infections (STI). To improve our understanding of this epidemic, distribution of STI and testing behaviour in young MSM attending STI clinics in the Netherlands was analysed.

Methods National STI surveillance data on young MSM (15–24 years) for 2006–2011 were analysed. STI included were chlamydia, gonorrhoea, infectious syphilis and HIV. Chi-square test for trend was performed to analyse time trends in testing behaviour and STI positivity rates, multivariable logistic regression was used to identify factors associated with STI positivity.

Results Number of consultations in young MSM increased from 1161 in 2006 to 3167 in 2011 (+166%). The proportion not aware of

their HIV status decreased from 51% in 2006 to 32% in 2011 ($p < 0.05$). Between 2006 and 2011, STI positivity rate increased from 17.4% to 20.6% ($p < 0.05$), caused by a significant increase in positivity rate for chlamydia (9.5% to 11.0%) and gonorrhoea (8.4% to 10.1%). Syphilis positivity rate decreased significantly over time, HIV remained stable.

In multivariable analyses, factors significantly associated with an STI were being notified (OR:2.8; 95% CI: 2.5–3.2), multiple sex partners (OR:2.4; 95% CI: 2.0–3.0), previous STI (OR:1.9; 95% CI: 1.6–2.1) and being involved in sex work (OR:1.5; 95% CI: 1.2–1.9). In addition, non-Dutch young MSM were at significantly higher risk for an STI, as were homosexual men compared to bisexual men (OR: 1.3; 95% CI: 1.1–1.4).

Conclusions Since the number of consultations and the proportion aware of their HIV status increased over time, awareness for STI seems to be increasing in young MSM. However, gonorrhoea and chlamydia positivity rates are still increasing. Therefore special attention needs to be maintained towards counselling and reaching specific high-risk sub-groups, including young migrant MSM and young MSM involved in sex work to limit on-going transmission of STI.

P3.158 NEWLY IDENTIFIED HIV INFECTION AMONG PATIENTS DIAGNOSED WITH EARLY SYPHILIS, CHICAGO, IL, 2006–2011

doi:10.1136/sextrans-2013-051184.0616

I Tabidze, R Hazen, N Benbow. *Department of Public Health, Chicago, IL, United States*

Background Concomitant HIV and syphilis infections are prevalent among the same risk groups. Increases in syphilis cases among men who have sex with men (MSM) have been characterised by high rates of HIV co-infection. Our objectives were to compare demographic characteristics and percentage of persons diagnosed with Early syphilis (ES) and co-infected with HIV between 2006–2011.

Methods Surveillance data for ES (Primary, Secondary, Early Latent stages) and HIV cases reported to the Chicago Department of Public Health (CPDH) were analysed retrospectively using SAS version 9.3(2). Newly identified HIV infection was defined by earliest diagnosis date of HIV in the Enhanced HIV/AIDS Reporting System (eHars).

Results Between 2006–2011, there were 4,542 reported ES cases among 3,929 individuals; 40% (1,562/3,929) of individuals were matched to records in eHars. A total of 735 HIV infections occurred from 2006–2011: 52% (384) were co-infected from 2006–2008 and 48% (351) from 2009–2011. Despite decline in the number of HIV infections after syphilis diagnosis from 384 to 351 (–8.6%), the proportion of co-infected MSM from 2006–2008 and 2009–2011 remained stable at 92% and 91%, respectively. By race, the proportion of co-infected Black MSM increased from 54.2% to 57.1%, while the proportion of Whites remained stable (24.2% and 25.2%, respectively) and Hispanics declined (15.4% and 12.1%, respectively). Despite declines by race for most age categories, the number of co-infected Black MSM ages 13–24 increased by 29.2% and the number of co-infected White MSM ages 45–54 increased by 75%.

Conclusions Despite an overall decline in HIV co-infections, the proportion of co-infection remained stable among MSM with an increase in the percentages in HIV sero-prevalence among Black MSM ages 13–24 and White MSM age 45–54, identifying them as a critical target group for STI/HIV prevention efforts.

P3.159 IDENTIFYING SYPHILIS RISK NETWORKS THROUGH VENUE ATTENDANCE IN SAN FRANCISCO

doi:10.1136/sextrans-2013-051184.0617

¹S Stephens, ¹C Fann, ²F Strona, ²W Wolf, ¹S Cohen, ¹S Philip, ¹K Bernstein. ¹San Francisco Department of Public Health, San Francisco, CA, United States; ²Centers for Disease Control and Prevention, Atlanta, GA, United States

Background Many men who have sex with men (MSM) interviewed through syphilis partner services report large numbers of sex partners but can provide contact information for relatively few. Prioritizing interventions for patients with syphilis who are part of large sexual networks may be “high yield” and identifying venues named by syphilis cases who report high numbers of partners may help identify such networks. We compared syphilis patients across three levels of sexual partner frequency.

Methods For each venue reported by interviewed patients with early syphilis in 2011, we examined the distribution of total reported sex partners (not only named partners) in the last year. Based on the median number of total partners among men who named each venue, we categorised venues into three levels of partner frequency: high (> 15 partners reported), medium (6–15 partners reported), and low (< 6 partners reported). Interviewed early syphilis cases were then classified as attending high, medium, or low partner frequency venues; sociodemographic and risk behaviours were compared across the three venue categories using χ^2 tests.

Results In 2011, 433 patients with early syphilis named 32 venues. One hundred forty three (32.3%) patients were categorised as high partner frequency venue users, 226 (51.0%) as medium partner frequency venue users, and 74 (16.7%) as low partner frequency-only venue users. Patients with early syphilis that reported meeting partners at high-frequency venues were generally older, more likely to be white, have a previous syphilis infection, use methamphetamines in the previous year, and be HIV-infected (all $p < 0.05$) than those who reported meeting partners at medium-frequency and low-frequency venues.

Discussion Venues where partners are met may be an appropriate proxy for network membership. Targeting additional resources, outreach, and services to clients who attend high frequency venues may have a positive impact on syphilis prevention efforts.

P3.160 HIGH RISK SEXUAL BEHAVIOURS AND SEXUALLY TRANSMITTED INFECTIONS AMONG TEENAGE MEN WHO HAVE SEX WITH MEN

doi:10.1136/sextrans-2013-051184.0618

¹H Zou, ^{*1,2}C Fairley, ³A Grulich, ⁴S Garland, ²J Sze, ²A Afrizal, ^{*1,2}M Chen. ¹School of Population Health, University of Melbourne, Carlton, Australia; ²Melbourne Sexual Health Centre, Alfred Health, Carlton, Australia; ³Kirby Institute, University of New South Wales, Sydney, Australia; ⁴Department of Obstetrics and Gynaecology, University of Melbourne, Parkville, Australia

^{*}Joint last authors

Background Data on testing and detection of sexually transmissible infections (STIs) in younger MSM are scarce and no specific study focusing on teenage MSM has been published. In this study we report on sexual risk behaviours and STI testing and detection in teenage MSM aged 15–20 attending a sexual health service.

Methods Data were extracted from Melbourne Sexual Health Centre's computerised medical records system on self-reported sexual behaviours and test results between July 2008 and June 2012. Results for MSM aged 15–20 were compared with those of older MSM.

Results 445 MSM aged 15–20 and 4313 MSM aged 20 or older were included. The median number of casual male partners in the past 12 months was 4 and 5 ($p = 0.015$) for teenage and older MSM, respectively. Compared to older MSM, Teenage MSM were less likely to participate in insertive anal sex (91.9% vs 86.8%, $p = 0.002$) and more likely to participate in receptive anal sex (86.3% vs 92.4%, $p = 0.002$) with casual male partners. Teenage MSM were more likely to consistently use a condom in insertive anal sex (39.0% vs 32.7%, $p = 0.024$) with regular partners but less likely to consistently use a condom in receptive anal sex with casual male partners (45.5% vs 56.6%, $p = 0.001$).