

Results Between January and December 2010, 227 MSM received STI services in the VICITS clinics in Tegucigalpa, San Pedro Sula and La Ceiba. Patients' mean age was 27.4 years. Overall 60.8% (135/222) reported alcohol use and 34.7% (76/219) reported drug use during the last year. An STI in the previous 12 months was reported by 37.6% (83/221) and 13.6% (30/219) reported engaging in sex work. Out of those patients who reported engaging in sex work, 86.5% (94/109) used a condom during their most recent sexual encounter, 88.3% (147/166) reported using a condom with casual partners and 64.5% (74/115) with stable partners. Overall, 12.3% (10/81) were infected with HIV, 10.3% (13/126) had a confirmed syphilis infection, 3.6% (5/138) were infected with chlamydia and gonorrhoea.

Conclusions Results from the first year of STI clinics for MSM evidence high HIV and syphilis prevalence rates. Behaviour change interventions targeting this community should focus on increasing condom use. Efforts should be made to increase the number of MSM attending specialised services.

P1-S2.43 BEHAVIOURAL AND BIOLOGICAL SURVEILLANCE AMONG MAN WHO HAVE SEX WITH MAN USING RESPONDENT-DRIVEN SAMPLING METHODOLOGY IN MANAUS, AMAZON, BRAZIL

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¹A S Benzaken, ²E G Galban, ³N S Benzaken, ⁴C K, ⁵A Pinho, ⁶M Mello, ¹F Vasquez, ¹C A Barros, ¹L R Franco Sansigolo Kerr. ¹Alfredo da Matta Foundation, Manaus, Brazil; ²Instituto Nacional de Gastroenterologia, Habana, Cuba; ³Nilton Lins University, Brazil; ⁴Tulane University, School of Public Health and Tropical Medicine, New Orleans, USA; ⁵Escola Nacional de Saúde Pública, Brazil; ⁶CDC, Brazil, Brazil; ⁷Universidade Federal do Ceará, Brazil

Background There is a renewed interest in including men who have sex with men (MSM) in global HIV surveillance. A multicenter study of 10 Brazilian cities was designed to generate a national-level estimate the prevalence of HIV and syphilis among MSM. This abstracts presents the results of one of the participating cities.

Objectives To establish a baseline among MSM in Manaus to continuously monitor the prevalence of HIV and syphilis infection, level of knowledge about STI/HIV/AIDS, prevailing sexual attitudes and practices, and frequency of acts of discrimination against MSM.

Methodology A cross-sectional study of 824 MSM (>18 years old) was conducted from October to May 2008 using respondent-driven sampling (RDS)- a chain-link and snowball sampling method that generates probability-based samples and is systematic, so it can be used to develop comparable surveillance data.

Results The weighted prevalence obtained with the use of Respondent-Driven Sampling Analysis Tool (RDSAT) software were 6.8% (CI 4.9 to 9.8) for HIV and 4.0% (CI 2.6 to 5.8) for syphilis. A number of participants reported sex with both men and women (47.8% of HIV positive and 56.1% of syphilis cases), while 20% of HIV positive and 30% of syphilis cases classified themselves as gay or homosexual. A previous infection of syphilis was the main predictive variables associated with HIV. The average age of first intercourse was 13.25 (with a range 5–23). This pattern of early sex suggests abuse. Fifty four point five per cent of participants had their first sexual intercourse with men, 42.6% with women, and 2.2% with transvestites. Participants also reported—41% (CI 37 to 47) used condoms in their first relationship, 73.1% (CI 69.7 to 77.2) had at least one casual sex partner during the previous 12 months, 31.6% (CI 27.7 to 35.9) used condoms consistently with casual relationships if they were with men and 15.5% (CI 11.9 to 18.9) with a woman. Nineteen per cent of MSM said they had been the target of direct physical aggression due to their sexual identity, 10% reported being forced to have sex against their will, and over 30% reported being humiliated or disrespected because of their sexual orientation.

Conclusions The prevalence of HIV and syphilis infection in MSM in the city of Manaus is relatively high. There is substantial discrimination against MSM. The need of specific public policy and awareness campaigns for this vulnerable group is urgent.

P1-S2.44 TRENDS IN STI IN MSM VISITING DUTCH STI CENTRES; DOES AGE MATTER?

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¹F Koedijk, ²P van Beek, ³K Koops, ^{1,3}M A B van der Sande, ⁴On behalf of the Dutch STI centres. ¹National Institute for Public Health and the Environment, Bilthoven, Netherlands; ²Schorer, Netherlands' institute for homosexuality, health and well-being, Netherlands; ³Academic Medical Centre Utrecht, University of Utrecht, Utrecht, the Netherlands, Netherlands; ⁴A v Daal (East), P v Leeuwen (North-Holland Flevoland), F de Groot (North), A Niekamp (Limburg), M Langevoort (Utrecht), A v Camerijk (South-Holland North), J vd Sande (ZeeBla), E vd Veen (South-Holland South), Netherlands

Objectives This study examined the distribution of selected sexually transmitted infections (STI) in men and men having sex with men (MSM) attending STI clinics in the Netherlands, separately for young (≥ 25 years) and older (> 25 years) MSM.

Methods Data from 2004 up to June 2010 from the Dutch national surveillance in the STI centres were used to characterise trends in positivity rate in STI (at least one of the following—chlamydia, gonorrhoea, syphilis or HIV). Logistic regression was used to identify factors associated with STI positivity in both groups.

Results Older MSM tested more often positive for STI than younger MSM—21.5% vs 18.4%, respectively ($p < 0.05$). However, in older MSM there was a significant decreasing time trend in STI positivity (from 23% in 2004 to 19% in 2010, $p < 0.05$, abstract P1-S2.44 figure 1), while in young MSM the STI positivity rate remained stable over time. In multivariate analyses for young MSM, non-Dutch MSM tested significantly more often positive (OR 1.4, 95% CI 1.3 to 1.6), as did those with a previous STI (OR 1.9, 95% CI 1.6 to 2.1), known HIV positives (OR 3.1, 95% CI 2.3 to 4.2), sex workers (OR 1.2, 95% CI 1.1 to 1.6) and those with a low socio-economic status (OR 1.5, 95% CI 1.2 to 1.9). In older MSM, also non-Dutch MSM tested significantly more often positive (OR 1.2, 95% CI 1.1 to 1.2), as did those with a previous STI (OR 1.6, 95% CI 1.5 to 1.7), known HIV positives (OR 1.9, 95% CI 1.8 to 2.1) and those with a low socio-economic status (OR 1.2, 95% CI 1.1 to 1.3). In contrast with young MSM, older MSM working as sex workers were at significantly lower risk (OR 0.7, 95% CI 0.6 to 0.9) for testing positive for any STI.

Conclusions Young MSM are a specific group within total group of MSM, with some risk factors differencing from older MSM. While trends in positivity are decreasing over time in older MSM, they remain stable and high in young MSM. Therefore special attention needs to be paid towards counselling and reaching (specific groups of) young MSM, since they are at high risk for STI acquisition and transmission.

P1-S2.45 CLUSTERS OF NEISSERIA GONORRHOEAE INFECTED PATIENTS ARE NOT LINKED TO HIV INFECTION WITHIN THE HOMOSEXUAL POPULATION IN AMSTERDAM, THE NETHERLANDS

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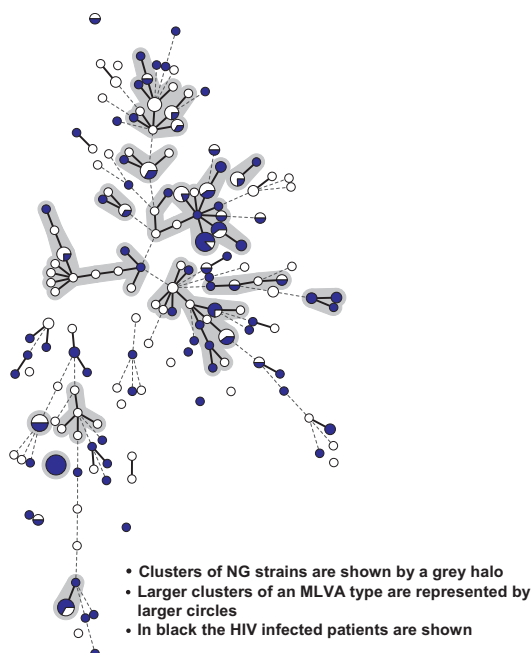
R Heymans, S Bruisten, A Matser, T Heijman, H de Vries, M S van der Loeff. Health Service of Amsterdam, (GGD), Amsterdam, Netherlands

Background Sexual risk behaviour increased since the introduction of antiretroviral treatment against HIV-1. Consequently, since the

mid-90s the gonorrhoea transmission was raised posing a serious public health problem especially among men who have sex with men (MSM). We examined if separate sexual networks exist of HIV-infected and of HIV-negative MSM in relation to transmission of gonorrhoea. Using molecular typing of *Neisseria gonorrhoeae* (NG) we aimed to identify clusters of patients with specific NG strains and examined possible linkage to HIV infection and other characteristics.

Methods From July 2008 to August 2009, MSM visiting the Amsterdam outpatient clinic were recruited for a network study concerning sexually transmitted infections (STI). Inclusion criteria were age ≥ 18 years, homosexual contact in the preceding 6 months, and giving informed consent. After screening for STI the participants answered questions regarding sexual behaviour, meeting places, and characteristics of sexual partners (up to 4 sex partners). Only patients with an anal or genital NG infection (n=246) were included in the current analysis. NG cultures were amplified and genotyped using a published NG-MLVA typing method.

Results Included patients (median age 36 years, IQR 30–42) were predominantly Dutch (83%). Coinfections with chlamydia (28%) and HIV (48%) were common. Hierarchical cluster analysis of 246 MLVA profiles classified 152/246 MSM in 13 large clusters (5 to 36 patients) indicating the circulation and ongoing transmission of different NG strains in this population. In three clusters a significantly ($p < 0.001$) higher proportion of NG isolates had decreased susceptibility to cefotaxime. HIV infected MSM were older than HIV negative MSM and were evenly distributed over the NG clusters (see Abstract P1-S2.45 figure 1). There were no significant differences in age, nationality, nor in other coinfections between the various NG clusters.



Abstract P1-S2.45 Figure 1 GGD.

Conclusions NG-MLVA revealed clusters of MSM reflecting distinct NG transmission networks in the Amsterdam population. As no NG clusters were identified that consisted predominantly of HIV infected or HIV negative MSM, it appears that there are no separate HIV infected and HIV negative sexual networks in the Amsterdam MSM population connected to gonorrhoea transmission.

P1-S2.46

IS GROUP SEX A SETTING FOR INCREASED RISK FOR HIV AND OTHER STI AMONG HIV-NEGATIVE MEN WHO HAVE SEX WITH MEN?

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J Heuker, I Stolte, U Davidovich. *Public Health Service, Amsterdam, Netherlands*

Background Transmission of HIV and other Sexually Transmitted Infections (STI) is ongoing in Western populations of Men who have Sex with Men (MSM). The main indicator of sexual risk is unprotected anal intercourse (UAI) with casual sex partners. It was suggested that group sex might be a high risk setting for HIV and STI transmission. Aim of the present study is to identify differences in sexual risk behaviour and STI-rates among MSM engaging in group sex compared to one-on-one casual sex.

Methods We used cross-sectional data derived through 6-monthly questionnaires and STI screening (infectious syphilis, gonorrhoea or Chlamydia) from the Amsterdam Cohort Studies (ACS) between December 2008 and December 2009. The study population (n=310) consisted of HIV-negative MSM who reported having engaged in both group sex and one-on-one sex (n=119) and MSM reporting one-on-one sex only (n=191). To identify differences in sexual risk behaviour and STI-rates between MSM engaging in group sex and one-on-one sex, we used χ^2 tests, Mann-Whitney U tests and logistic regression analyses, corrected for repeated measures.

Results MSM engaging in both group sex and one-on-one sex had less anal intercourse (AI) during group sex (79/119; 66.4%) compared to during one-on-one sex (106/119; 89.1%). Moreover, they were less likely to have UAI during group sex compared to one-on-one sex (OR adj 0.44; 95% CI 0.26 to 0.74). Men engaging in one-on-one sex only reported less AI (129/191; 67.5%), while UAI-levels were similar (OR adj 1.47; 95% CI 0.82 to 2.62) compared to one-on-one sex of men who also engage in group sex. Drug use during sex was associated with UAI (OR adj 1.78; 95% CI 1.03 to 3.09), independent of whether sex took place in a group sex or one-on-one sex setting. Finally, men engaging in group sex were more likely to be diagnosed with any STI (13.4% vs 5.1%; $p=0.013$) compared to men engaging in one-on-one sex only. For men engaging in one-on-one sex only, but not for men engaging in group sex, UAI was associated with being diagnosed with any STI (OR 8.44; 95% CI 2.0 to 35.2).

Conclusions The group sex setting might not pose a threat for HIV-infection in MSM, as UAI-rates were lower during group sex compared to one-on-one sex. However, although they did not report more UAI, men engaging in group sex had higher STI-rates than men engaging in one-on-one sex only. This indicates that men engaging in group sex practice other sexual techniques than AI that contribute to acquiring STI.

P1-S2.47

SEROSORTING AND SEXUAL RISK BEHAVIOUR DURING CASUAL SEX AMONG MSM - FROM ONE-NIGHT STANDS TO SEX BUDDIES

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¹I Stolte, ¹W Van den Boom, ^{2,3,4}T Sandfort, ⁵U Davidovich. ¹Public Health Service, Amsterdam, Netherlands; ²HIV Center for Clinical and Behavioural Studies, New York, USA; ³New York State Psychiatric Institute, New York, USA; ⁴Department of Psychiatry, Columbia University, New York, USA; ⁵Public Health Service, Amsterdam, Netherlands

Background Among HIV-negative men who have sex with men (MSM), any incident of unprotected anal intercourse (UAI) between casual partners is usually regarded as risky for HIV. However, men are increasingly using knowledge of their casual partner's HIV-status to reduce the risk for HIV during UAI (serosorting). Since familiarity between casual partners may lead to higher levels of UAI