Background Commercial sex workers (CSW) are particularly exposed to sexually transmitted infections (STI). To direct prevention measures, we estimated the prevalence of the three most common bacterial STI (chlamydia, gonorrhoea and syphilis) and examined factors associated with infection among CSW visiting an STI-clinic in the Netherlands.

Methods A CSW was defined as a person exchanging sex for money or other valuable goods in the past 6 months prior to the consultation. Using 2006–2011 national surveillance data on STI clinic visits, we estimated the prevalence of consultations with at least one STI (positive laboratory test for chlamydia, gonorrhoea and/or syphilis). We used univariable and multivariable logistic regression to identify factors associated with these STI, stratified by gender.

Results Between 2006 and 2011, the prevalence of bacterial STI was 9% among 23,825 female sex workers (FSW) and 18% among 2,335 male sex workers (MSW) consultations. Young CSW (15–24 years) had a higher prevalence (27% for MSW, 16% for FSW) than CSW aged >25 years (15% for MSW, 7% for FSW, p < 0.0001). Prevalence of STI was higher among MSW having sex with men than among heterosexual MSW (OR = 1.95 CI: 1.4–2.5). MSW who already knew their HIV positive status and MSW who were diagnosed as HIV positive during the consultation had a higher prevalence than those who were tested negative for HIV (OR = 4.895% CI: 2.8–8.2 and OR = 3.495% CI: 2.3–4.9 respectively).

Conclusions Young male and female CSW, MSW having sex with men and known HIV-positive MSW had a higher prevalence of STI. Prevention activities need to target young sex workers to increase early diagnosis, prevention and treatment. MSW having sex with men and those known HIV positive may require more targeted interventions.

**P3.168** WITHDRAWN BY AUTHOR

**P3.169** EPIDEMIOLOGY OF SEXUALLY TRANSMITTED INFECTION AMONG OFFENDERS FOLLOWING RELEASE FROM THE JUSTICE SYSTEM

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Methods We performed a retrospective cohort study of individuals with any interaction with the justice system (N = 259,667 individuals), including arrest, gaol, juvenile detention, juvenile prison, or adult prison, between 2000–2008 (gaol: 2003–2008). These individuals were linked to STI positive test result data (N = 82,990 individuals) using a probabilistic identity matching algorithm based on name, date of birth, and social security number. We identified individuals with chlamydia (CT), gonorrhoea (GC), syphilis, or incident HIV within 365 days of release (or of arrest date). We calculated the prevalence of the three most common bacterial STI (chlamydia, gonorrhoea and syphilis) and examined factors associated with infection among CSW visiting an STI-clinic in the Netherlands. We performed a retrospective cohort study of individuals with any interaction with the justice system (N = 259,667 individuals), including arrest, gaol, juvenile detention, juvenile prison, or adult prison, between 2000–2008 (gaol: 2003–2008). These individuals were linked to STI positive test result data (N = 82,990 individuals) using a probabilistic identity matching algorithm based on name, date of birth, and social security number. We identified individuals with chlamydia (CT), gonorrhoea (GC), syphilis, or incident HIV within 365 days of release (or of arrest date). We calculated the prevalence of the three most common bacterial STI (chlamydia, gonorrhoea and syphilis) and examined factors associated with infection among CSW visiting an STI-clinic in the Netherlands.

Results In cross-sectional analyses, 19% of individuals with any interaction with adult prison, 14% with gaol, 14% with arrest, 34% with juvenile prison, and 25% with juvenile detention had a positive STI. Average annual incidence of any STI in the year after release was 10% for adult prison, 13% for gaol, 10% for arrest, 26% for juvenile prison, and 22% for juvenile detention. These differences in incidence were driven by differing demographic compositions, with younger, minority and female populations demonstrating the highest rates of STI following release. Approximately 16% of all STIs (13% CT, 20% GC, 12% syphilis, 14% incident HIV) can be attributed to individuals within one year of release from the justice system.

Conclusions The time following any interaction with the justice system represents a high-impact opportunity to reduce STI burden at a population-level. Structural interventions targeting this vulnerable time period are indicated.

**P3.170** AN EPIDEMIOLOGIC STUDY OF MYCOPLASMA GENITALIUM AMONG MALE STD PATIENTS IN GUANGXI, CHINA

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Background Mycoplasma genitalium (MG) is an emerging pathogen of NGU. In China, limited studies have indicated a prevalence of 10%–24% among men with NGU. The objective of this study was to determine the prevalence of urethra MG infection among male patients attending STD clinic in Guangxi, China.

Methods Male patients attending STD clinic in He Zhou, Guangxi province between July and September 2009, were invited to participate in a cross-sectional study of the prevalence and behavioural risk for MG infection. MG testing was performed in the National Center for STD control of China, using a previously published real time PCR that target the MgPa adhesion gene. Data were double entered into a database using EpiData software by two research assistants. SPSS for windows 13 was used for statistical analysis.

Results 423 male STD clinic patients agreed to participate in this research. 114 (26.1%) of urine specimens were MG positive by PCR testing. In the univariate logistic regression analyses, several individual factors were significantly associated with MG infection. Males infected with MG were more likely to be younger, be single, divorced or widowed, of migrant population, and to be living alone or with partners rather than spouses.

Conclusion This is the first study to investigate the prevalence rate and risk factors of MG infection among male patients attending STD clinic in southwest China. The high prevalence rate suggests that increased attention should be paid to MG screening and treatment in this high risk population.

**P3.171** SEXUALLY TRANSMITTED INFECTIONS (STI) AMONG YOUTH WITH PERINATAL HIV INFECTION

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Background With antiretroviral therapy (ART), children who were perinatally infected with HIV (PHIV) are now reaching adolescence/young adulthood. A few studies have described their self-reported sexual behaviours, but none measured the incidence of STI (objective markers of risky behaviour) among PHIV youth.

Methods Separately maintained New York City (NYC) HIV and STI surveillance registries were matched using a deterministic algorithm; the matched dataset contained HIV/AIDS cases reported since 1981 (including retrospectively-identified cases), and STI reported from 2000–June 2010. We calculated incidence of having STI during 2000–2009 (chlamydia, gonorrhoea and early syphilis combined) among the cohort of PHIV individuals born between 1976 and 1987, diagnosed with HIV before age 13, and alive as of 12/31/1999. Additionally the STI case rate among all PHIV between ages 13–24 during 2000–2009 was compared to that for the NYC population of the same ages.