P08.16 RISK PROFILE OF PATIENTS DIAGNOSED WITH A SEXUALLY TRANSMITTED INFECTION (STI): A COMPARISON OF PATIENTS CONSULTING GENERAL PRACTICES (GP) AND SPECIALISED SEXUAL HEALTH CLINICS (SHC) IN BELGIUM, 2013

¹R Verbrugge*, ²V Van Casteren, ³S Moreels. ¹Scientific Institute of Public Health, Epidemiology of Infectious Diseases, Belgium; ²Scientific Institute of Public Health, Health Care Research, Belgium

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Introduction Assuming that STI patients visiting SHC have different risk profiles triggered STI surveillance by GP. The aim was to compare patient characteristics and to explore the contribution of the different health care settings to STI control.

Methods STI surveillance exists since 2000 by voluntary participation of gynaecologists, dermatologists, medical centres for sex workers (SW), STI clinics, and aids reference centres (ARC), collecting socio-demographic, testing and behavioural data. They are defined as SHC.

In order to compare STI patients consulting GP and SHC, the GP sentinel network was invited to participate STI surveillance in 2013. Chi2-test for proportions was used to test for significant differences.

Results GP (N = 160) and SHC (N = 30) reported respectively 158 and 855 episodes.

Patients did not differ in gender, age, education and STI diagnosis.

GP patients consulted because of a STI complaints (GP: 67%; SHC: 42%), SHC performed more screening (GP: 17%, SHC: 36%). SHC patients mentioned more multi partnership (GP: 36%; SHC: 73%) and used more condoms (GP: 20%; SHC: 46%). The proportion of MSM, SW and drug users was higher in SHC (resp. GP: 39%, SHC: 66%; GP: 1%, SHC: 15%; GP: 0%, SHC: 3%). The proportion of MSM by STI, with exception of genital warts, was always higher in SHC and was strongest for syphilis (GP: 60%, SHC: 92%).

Conclusion STI patients were analogue for age and gender in the 2 types of health care settings. GP screened less for STI and diagnosis was made in case of a particular complaint. High risk groups (MSM, SW and drug users) were more seen in SHC than in the GP network. The probable lower risk profile of GP patients could be dedicated to lower STI knowledge and risk awareness, by as well GP and patient not belonging to a known risk group. GP training in STI consulting and opportunistic screening with risk factor awareness and strengthen condom use in general are recommended.

Disclosure of interest statement Nothing to Declare.

P08.17 INFLUENCE OF *CHLAMYDIA TRACHOMATIS* ORGANISM LOAD ON REINFECTION RISK

¹WM Geisler*, ²R Gorwitz, ²J Papp, ¹B Van Der Pol. ¹University of Alabama at Birmingham; ²Centers for Disease Control and Prevention

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Background *Chlamydia trachomatis* (CT) infection remains highly prevalent. CT reinfection occurs in up to 20% of persons within months after treatment, likely contributing to sustaining the high chlamydia prevalence. Most studies evaluating predictors of reinfection have focused on epidemiological and behavioural factors. Our program is studying host immune responses and organism factors contributing to reinfection. In this study,

we evaluate the influence of CT organism load on reinfection risk.

Methods In an ongoing study, women presenting to an STD Clinic in Birmingham, AL, for CT infection treatment are enrolled, treated, and return for 3- and 6-month follow-up visits. At each visit, clinical information and endocervical swabs are collected. CT detection and organism load quantification is performed using real-time PCR. To estimate organism load, a CT calibrator is run using stock CT samples with known organism counts to create cycle threshold standard curves for comparison with clinical samples, providing reliable and reproducible results that allow for relative quantification on a log scale.

Results Of 119 participants completing the study to date: 95% were African American and 56% had prior CT infection (per report and chart review). The median log₁₀ CT load at enrollment was 5.8/mL (range 3.1 – 8.9). CT reinfection occurred in 22 (18%). The median log₁₀ load at enrollment was significantly lower in those with subsequent reinfection compared with those without reinfection (5.05/mL vs. 6.1/mL; P = 0.012 by Wilcoxon rank sum test).

Conclusion A lower endocervical CT organism load at the time of treatment was associated with a greater CT reinfection risk. The reason for this is unclear, but it is possible lower organism loads could elicit weaker protective cellular immune responses, predisposing to greater reinfection risk. In addition to continuing organism load testing on more samples to verify this association, we will be investigating cellular immune responses in this cohort.

Disclosure of interest statement Nothing to Declare.

P08.18 REGIONAL VARIATION IN EMERGENCY DEPARTMENT PRESENTATION RATES OF CHLAMYDIA RELATED MORBIDITY IN FOUR STATES OF AUSTRALIA

¹JL Goller*, ¹AM De Livera, ²RJ Guy, ³CK Fairley, ¹JS Hocking. ¹Melbourne School of Population and Global Health, University of Melbourne; ²Kirby Institute, UNSW, Australia; ³Central Clinical School, Monash University and Melbourne Sexual Health Centre

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Background Pelvic inflammatory disease (PID) and ectopic pregnancy among women and epididymitis among men are important sequelae of chlamydia. In Australia, chlamydia prevalence is higher among younger populations, Indigenous Australians, and in regional and remote areas. The burden of chlamydia sequelae by Australian region is unknown. We assessed if rates of emergency department (ED) presentations in Australia for chlamydia sequelae vary by remoteness of residence.

Methods Age and sex specific ED rates per 100,000 population of PID, ectopic pregnancy or epididymitis among 15–44 year-old Victorian, New South Wales, Queensland and South Australian residents were calculated for the years 2009 and 2010 using hospital and Australian Bureau of Statistics estimated resident population data. Logistic regression was used to assess regional variation in rates and adjusted for age, remoteness and socio-economic group (SES) of residential postcode in deciles.

Results During 2009–2010, overall ED rates per 100,000 among 15–44 year-old residents from all four states were 76.8 (95% CI: 74.8–78.8) for PID, 73.0 (95% CI: 71.1–75.0) for ectopic pregnancy and 86.4 (95% CI: 84.3–88.4) for epididymitis. Multivariable analysis showed that PID rates in female residents: were higher in inner-regional (AOR = 1.6; 95% CI: 1.5–1.7) and outer regional/remote areas (AOR = 2.1; 95%