Prevalence of Chlamydia, Gonorrhoea, M. genitalium and T. vaginalis in the general population of Slovenia, 2016–2017

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Background To inform sexually transmitted infections (STIs) prevention and control, objective of the second National Survey of Sexual Lifestyles, Attitudes and Health was to estimate the prevalence of Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium and Trichomonas vaginalis infections.

Methods A survey of the general population aged 18–49 was conducted in 2016–2017. We used stratified two-stage probability sampling from the Central Population Registry. Survey respondents were invited to contribute first void urine specimens for testing for C. trachomatis and unlinked anonymous testing for other STIs to obtain population prevalence estimates. Specimens were tested for C. trachomatis with specific real time PCR targeting both cryptic plasmid and bacterial chromosome. Positive results were confirmed by Sanger sequencing of the amplicon. Other STIs were detected by a commercially available multiplex PCR (FTD Urethritis plus, fast-track Diagnostics). To avoid false negative results, the human housekeeping gene was amplified in all tested samples.

Results Urine specimens from 452 men and 635 women (56.4% of all survey respondents) were tested for chlamydia. Overall weighted prevalence was 0.5% (95% CI 0.1% to 1.4%) in men and 1.7% (95% CI 0.9% to 3.1%) in women. Age-specific prevalence was the highest among 18–24 years old (men: 2.8%; 95%CI 0.9% to 8.5%; women: 4.7%; 95% CI 1.6% to 10.7%). Urine specimens from 430 men and 593 women (53.0% of all survey respondents), were tested for other STIs. No infections with N. gonorrhoeae were found. Weighted prevalence estimate for M. genitalium was 0.5% (95% CI 0.2% to 1.5%) in men and 0.3% (95% CI 0.0% to 0.9%) in women. Parasite T. vaginalis was detected in one woman only. Corresponding weighted prevalence was 0.2% (95% CI 0.0%–0.9%).

Conclusion The prevalence of C. trachomatis infection in the general population of Slovenians aged 18–24 was substantial. The other three STIs were relatively rare.

Disclosure No significant relationships.

Effect of Metronidazole Treatment on Recurrent and Persistent Bacterial Vaginosis: A Pilot Study

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Background This study aims to investigate the effect of metronidazole for the treatment of recurrent and persistent bacterial vaginosis (BV).

Methods Stored vaginal swabs of 80 African American (AA) women were randomly selected from a previously conducted clinical trial for this pilot study. Women with BV were treated with metronidazole. Vaginal smears were categorized by the Nugent score (NS) [0–3; normal; 4–6; intermediate state; 7–10, BV]. Women were classified as recurrent BV (RBV), persistent BV (PBV) or no BV based on three consecutive NS. RBV occurs when an episode of BV occurs after successful treatment of a prior episode. PBV occurs in instances when BV treatment fails to restore healthy Lactobacillus levels. All women were asymptomatic for BV at baseline and followed every two months for four months.

Results After four months, 22.5% (CI: 13%, 32%) of women did not have BV, 7.5% (CI: 2%, 13%) had RBV and 70% had PBV (CI: 60%, 80%). 30% of treated women did not have BV compared to 15% of untreated women (p=0.18). BV recurred among 12.5% of treated women and 2.5% of untreated women (p=0.02). BV persisted among 57.5% of treated women and 82.5% of untreated women (p=0.03). Women that were treated had 0.33 decreased odds (95%CI: 0.12, 0.92, p=0.05) of having PBV as compared to untreated women. The mean age was 21.4 years (SD: 2.11 years). Prior antibiotic use among those who were previously treated for BV, 60% were treated more than five times. Douching was reported by 49% of the sample.

Conclusion These preliminary findings suggest, standard BV treatment may not be effective among women with RBV or adherence to treatment may be low among women with asymptomatic BV.

Disclosure No significant relationships.