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 unlike 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.