The prevalence of syphilis with RP and TPHA was 0.9% (12/1400). RTs for syphilis showed > 90% sensitivity and 100% specificity. RTs for C trachomatis showed a low sensitivity between 22 – 37% and a 99% specificity, RTs for N gonorrhoeae showed 97%.

Conclusions In women with symptoms of LGTIs RTs used at the point of care for syphilis have a sensitivity > 90%. RTs for CT have sensitivity < 40% and Rts for NG have sensitivity < 12.5% %.

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P2.021 PREVALENCE OF SEXUALLY TRANSMITTED INFECTIONS IN YOUNG PEOPLE IN ST. PETERSBURG, RUSSIA, AS DETERMINED USING SELF-COLLECTED NON-INVASIVE SPECIMENS

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Background Young people are worldwide a risk group for sexually transmitted infections (STIs) and a primary target for screening. Knowledge on STI prevalence in the youths is essential to elaborate preventive measures. Self-sampling has been shown to be an effective approach in screening and epidemiological programmes. This study aimed to assess the prevalence of *Chlamydia trachomatis*, *Neisseria gonorrhoeae*, *Mycoplasma genitalium* and *Trichomonas vaginalis* in young people in St. Petersburg, Russia using self-collected non-invasive specimens.

Methods In total, 1207 consecutive sexually active attendees (1053 female and 154 male) of the youth centre Yuventa in St. Petersburg, Russia, aged 15–25 years and consenting to participate, were enrolled in the study from June through November 2011. The mean age of the women was 20.2 ± 2.8 years, and the men 20.2 ± 2.9 years. Vaginal and male urine samples were self-collected using Self-Collection Specimen Kit (Central Research Institute for Epidemiology, Russia) and UriSWAB (Copan, Italy), respectively. Testing for the STIs was performed by multiplex real-time PCR (AmpliSens *N.gonorrhoeae/C.trachomatis/M.genitalium/T.vaginalis*-MULTIPRIME-FRT, Central Research Institute for Epidemiology).

Results The overall prevalence of the examined STIs was 8.1% (85 of 1053) in the women and 7.8% (12 of 154) in the men. *C. trachomatis*, *N. gonorrhoeae*, *M. genitalium* and *T. vaginalis* were detected in 70 (6.6%), 6 (0.6%), 12 (1.1%) and 3 (0.3%) women, respectively. The prevalence of *C. trachomatis* and *M. genitalium* in the men was 6.5% (10 of 154) and 1.3% (2 of 154). *N. gonorrhoeae* or *T. vaginalis* were not detected in any men. In 7 women, multiple agents were found, i.e., *C. trachomatis* and *N. gonorrhoeae* (n = 3), *C. trachomatis* and *M. genitalium* (n = 2), and *M. genitalium* and *T. vaginalis* (n = 1).

P2.022 LABORATORY DIAGNOSIS OF GENITAL *NEISSERIA GONORRHOEAE* INFECTIONS IN THREE REGIONS OF UKRAINE

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Background The knowledge about approaches used for diagnosis of STIs in Ukraine is scarce. Aiming to optimise the laboratory diagnosis of STIs and introduce antimicrobial resistance surveillance for *Neisseria gonorrhoeae*, we aimed to survey the algorithms, methodologies and reagents used, and the laboratory capacities and possibilities in three regions of Ukraine.

Methods Laboratories of three regions of Ukraine, namely Dnepropetrovsk, Ternopil and Zaporoz, were visited and detailed interviews were conducted.

Results The three main dispensaries visited serve both the corresponding region as well as the city needs, and also have their own outpatient clinics. Large number of samples is tested, for example in Dnepropetrovsk and Zaporoz yearly 41,000 and 26,000 samples are tested by culture for gonococci, respectively. The majority of samples are coming from gynaecologists and only 0–0.4% contains gonococci. In contrast, testing 4,000 to 10,000 venereology patients per dispensary and year reveals 4–9% of positive samples in all three regions. PCR equipment is available in Dnepropetrovsk and Zaporoz, however, this is rarely used because of lack of funding from the state. Nevertheless, in the private laboratories PCR is run using variety of reagents. Gonococcal culture is primarily performed using Russian or Ukrainian selective growth media. *Chlamydia trachomatis* and *Trichomonas vaginalis* iagnosed using cytochrome staining, direct immunofluorescence nd/or serology. For the diagnosis of syphilis Wasserman reaction is still frequently sed; screening is conducted using nontreponemal microprecipitation test, an analogue o the VDRL test. Laboratory quality management systems are unavailable.

Conclusion Optimization and quality assurance of he laboratory diagnosis of STIs in the three interviewed and visited laboratories is crucial. Both methods for testing, reagents as well as the opulations tested have to be revised and adjusted to international evidence-based standards.

P2.023 ORGANISATION OF THE LABORATORY SERVICES FOR DIAGNOSIS OF SEXUALLY TRANSMITTED INFECTIONS IN TVER, RUSSIA

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Background The structure of laboratory services differs among different regions of Russia. In order to apply to international standards initially analysis of the organisational structure, methods and methodologies used is necessary. This study reviewed the features of the laboratory diagnosis of STIs in the Tver region, central Russia.

Methods A questionnaire-based survey concerning STI laboratory services in the Tver region was conducted.

Results The Tver region consists of 36 districts, populated by 1.3 million citizens (406,000 in the Tver city). The wast majority of the laboratories are owned by the State, however, a few privately owned laboratories are also present. The State-owned laboratories are divided into peripheral-district branches, most of them run mainly serology of syphilis and microscopy of genital smears. The remaining laboratory diagnostics is performed at the centralised laboratory at Center of Specialized Medical Aid in Tver. This laboratory examines samples sent from the regional branches and different city medical institutions, as well as samples collected from patients consulting physicians at its own Center. The test result is delivered either to the treating physicians or directly to the patient. Microscopy of Gram and methylene blue stained smears were the main