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Background Little is known about the recent epidemiology and public health impact of *Trichomonas vaginalis* infection in England. We investigated the distribution and risk factors of this common sexually transmitted infection (STI) and assessed whether the potential burden of infection could warrant a review of existing screening guidelines.

Methods We used data from the Genitourinary Medicine Clinic Activity Dataset (GUMCAD) over a three year period (2009–2011) to investigate the characteristics of patients diagnosed with *T. vaginalis*, and to describe the distribution of cases in England. Case records were linked within each GUM clinic using the local patient identifier. Socio-demographic and clinical risk factors associated with a diagnosis of *T. vaginalis* were explored using multivariable logistic regression.

Results Rates of *T. vaginalis* infection were highest in London and the West Midlands. Risk of a *T. vaginalis* diagnosis was strongly associated with older age in comparison to those aged 20–24 years, non-white ethnicity, in particular black Caribbean (adjusted Odds Ratio [aOR] = 4.23, 95% CI 3.98–4.50 in women; aOR = 8.00, 95% CI 6.48–9.87 in men) and black 'other' (aOR = 4.13, 95% CI 3.80–4.49 in women; aOR = 5.75, 95% CI 4.22–7.83 in men) ethnic groups and birth in the Caribbean (aOR = 1.27, 95% CI 1.16–1.38 in women; aOR = 1.63, 95% CI 1.28–2.09 in men) compared to the UK. Current gonorrhoea (aOR = 3.66, 95% CI 3.30–4.05) or chlamydia (aOR = 1.58, 95% CI 1.49–1.68) infection was an important risk factor for a diagnosis of *T. vaginalis* in women.

Conclusion This study has characterised important patient groups at risk of *T. vaginalis* infection and allowed identification of areas of higher prevalence. Our results suggest that further research is needed to identify the public health benefits and feasibility of changing clinic screening protocols among at risk groups in these areas.

P3.092 **PREVALENCE OF TRICHOMONAS VAGINALIS IN FRANCE AND COMPARISON WITH CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHOEAE AS DETERMINED BY THE APTIMA TRICHOMONAS VAGINALIS NUCLEIC ACID AMPLIFICATION ASSAY**

doi:10.1136/sextrans-2013-051184.0551

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In France, few data on prevalence of *Trichomonas vaginalis* in the general population as well as in high-risk populations exist. We determined *Trichomonas vaginalis* (TV) together with *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) prevalence, in men and women with or without symptoms of sexually transmitted infection (STI), undergoing CT and NG screening in France.

683 men and 2432 women were enrolled on a basis of either urethral, cervical or vaginal swabs, urine or sperm samples, using the APTIMA *Trichomonas vaginalis* assay (ATV, Hologic|Gen-Probe) and the APTIMA Combo 2 assay for CT and NG (AC2, Hologic|Gen-Probe), respectively.

Overall TV, CT and NG prevalence in women was 0.7%, 6.13% and 0.49%, respectively, and in men 0.44%, 9.52% and 3.07%, respectively. All in all 20 patients were positive for TV, 17 women and 3 men, with the highest TV prevalence in women of > 40 years (1.59%), while CT (11.58%) and NG (0.87%) prevalence was highest in women < 30 years.

Co-infections were relatively low: No subject was coinfecting with CT/TV, most probably due to prevalence in different age groups, and 5 subjects were coinfecting with CT/NG, 3 women and 2 men.

The CT prevalence reported here is higher than what was reported in earlier epidemiologic studies in France. The low prevalence of TV may be due to a bias in tested population.

In this study we determined prevalence of the 3 infections in women and men in all age groups and in relation to the specimen type. Furthermore, we provide a detailed analysis of the results obtained from the 20 TV positive cases. Further studies are needed to estimate the prevalence of TV in other targeted populations.

P3.093 **SIMILAR, LOW PREVALENCE OF TRICHOMONAS VAGINALIS IN THREE PATIENT COHORTS FROM GENERAL PRACTITIONERS, A POPULATION BASED CHLAMYDIA SCREENING STUDY AND AN STI-CLINIC**

doi:10.1136/sextrans-2013-051184.0552

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Background Among sexually transmitted infections (STIs), *Trichomonas vaginalis* (TV) is the most common non-viral STI worldwide. However, in Europe, a limited number of studies, mostly on specific risk groups, have described a low TV prevalence. Therefore a large multi-cohort study was performed to investigate the prevalence of TV among three distinct Dutch patient populations. Additionally, the relationship between *Chlamydia trachomatis* (CT) and TV co-infection was assessed.

Methods 2089 participants, men and women, were included between 2008 and 2012 from three distinct cohorts. A total of 575 participants from the population-based national Chlamydia Screening Intervention (CSI) study, 465 attendees of the STI-clinic South Limburg and 602 patients from general practitioners (GPs) were included. An additional number of CT positives (n = 447) was included to assess TV and CT co-infection. All participants were assessed for TV using real-time PCR.

Results The overall prevalence of TV was 0.9% among the three distinct cohorts and no significant differences between the 3 study populations were observed (GP patients (1.5%), STI clinic (0.6%) and population-based cohort (0.7%)). TV was found in 0.7% of the CT positives and a similar 1.1% among CT negatives. In contrast to CT prevalence which significantly decreased with increasing age, TV prevalence was highest in the age group > 40 years (2%), but did not differ significantly from other age-groups.

Conclusion This large multi-cohort study confirms the low burden for TV in the Netherlands (< 2%) as in most European countries. We have no indication for standard TV testing in regular care.

P3.094 **TRICHOMONAS VAGINALIS INFECTION AMONG WOMEN OF REPRODUCTIVE AGE GROUP IN A COSMOPOLITAN SETUP**

doi:10.1136/sextrans-2013-051184.0553

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Trichomoniasis is one of the most common sexually transmitted infections in humans. In a prospective, observational study, 380 women attending the family planning (FP) clinic and Sexually Transmitted Diseases (STD) clinic in Kuala Lumpur were enrolled. Patient's information was obtained from the standardised medical records and voluntarily completed questionnaires. Three vaginal swabs from posterior fornix were taken from each patient. Different staining methods and cultivation in Diamonds medium were performed for the collected samples. Study subjects recruited in this survey were mostly young, with a geometric mean of 37.31 years (FP clinic) and 32.06 years (STD clinic). Malay, Chinese, Indians and others ethnic

groups accounted for 91%, 4%, 2% and 3% respectively at FP clinic. At STD clinic, almost all subjects were Chinese. The prevalence rate of trichomoniasis was 0.36% at FP clinic and 0.0% at STD clinic. Our findings suggested no association between contraceptive methods used and trichomoniasis infection at FP clinic. At STD clinic, it was observed that high risk for STIs acquisition was not associated with trichomoniasis positivity. The data demonstrated that the prevalence of trichomoniasis was very low at FP clinic and even absent at STD clinic. On the other hand, the high prevalence rates of other STIs among sex workers found from this survey suggested the need for more active interventions focused on this group.

P3.095 EXPERIENCES FROM WORKING WITH SEXUALLY TRANSMITTED INFECTIONS AND RELATED ISSUES AMONG TEENAGERS AND YOUTH IN TVER, RUSSIA

doi:10.1136/sextrans-2013-051184.0554

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Background The prevalence of sexually transmitted infections in Russia is high. Young sexually active individuals it is at highest risk to be infected, therefore increased access for consultations and testing is of great importance.

Methods . The data was collected during the site visit from the records of the Center in February, 2013.

Results The Regional Center for Prevention of the Reproductive Health of Teenagers and Youth "Your world.ru" (Твой мир.ru) was established in Tver, Russia in 2006. One of the multiple activities of the centre is prophylaxis and early detection of reproductive tract disorders, including STI and HIV infections. Medical and psychological help for the young population, aged from 15 to 24 years, of Tver city and region of Tver is provided free of charge by a team including young medical professionals, namely dermatovenereologists, gynaecologists, endocrinologists, urologists-andrologists and psychologists. In 2012, 2,000 young persons (more than 6,000 visits) attended the STI centre for testing and a genital tract infection was diagnosed in 15.3% of these. *Chlamydia trachomatis* was detected in 8.8% (71/805) and *Neisseria gonorrhoeae* in 4.0% (8/202) of the young persons tested. During the same year three new cases of syphilis and nine cases of HIV were also diagnosed. It is of grave concern that spread of HIV among the young population of Tver is exclusively sexual and is increasing!

Conclusion The STI morbidity of the young population, aged 15–24 years, is high in Tver and Tver region, Russia. Among the risk factors for acquiring STIs in Tver and Tver region are early sexual debut, active sexual life with frequent change of sexual partners, casual sex and unprotected sex. More active sexual education within this young age group is essential.

P3.096 HIV AND HCV PREVALENCE AND RISKY BEHAVIORS AMONG NEEDLE EXCHANGE PROGRAM USERS IN ALBANIA

doi:10.1136/sextrans-2013-051184.0555

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Background HIV and Hepatitis C virus (HCV) infection is one of the most frequent chronic blood-borne infections among injecting drug users (IDU) causing significant morbidity and mortality among them and their sexual partners. Currently, injection drug use is the dominant risk factor for HIV and HCV transmission due to

sharing syringes and drug injection equipment and is implicated in 30–40% of recent HCV cases in Albania. The objective of this study was to determine the prevalence and risk behaviours of HIV, HCV infection and Syphilis among IDU in Tirana, Albania.

Methodology Data were collected from June to November 2011 among Needle Exchange Program (NEP) users in Tirana, Albania using Respondent-Driven Sampling (RDS). Structured questionnaires were administered to measure drug use and sexual risk behaviours. Rapid test technique was used to determine the HCV, HIV and Syphilis prevalence.

Results 68 (34%) participants were positive for HCV; 1 (0.5%) for HIV and 2 (1%) with Syphilis. Heroin (93.2%) was the most frequently used drug, followed by diazepam (33.4%) and cocaine (30%). Risk factors for HCV infection included unsafe cleaning practises and sharing drug injection equipments. 40% of IDU have injected with a used needle, 34.1% sharing needles with 3 or fewer persons and 88% drew drug solution from a common container. Unsafe sex and multiple drug-using sexual partners were associated with HIV infection.

Discussion Results indicate that HCV prevalence remains unacceptably high among IDU when compared to the estimated HIV or Syphilis prevalence IDU is strongly associated with significant drug use and needle-sharing behaviours. HIV and Syphilis prevalence appear to be low and are mostly associated with sexual risk behaviours. The presence of HIV, HCV and Syphilis among NEP users suggests that these venues provide a good opportunity to provide continues prevention and care services to IDU and their partners.

P3.097 SOCIO-DEMOGRAPHIC CHARACTERISTICS AND DRUG RELATED HIGH RISK BEHAVIOUR IN PEOPLE WHO INJECT DRUGS (PWID) RECENTLY DIAGNOSED HIV POSITIVE IN BARNAUL, RUSSIA

doi:10.1136/sextrans-2013-051184.0556

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Background In 2012 60.4% of registered HIV cases were attributed to injection drug use in Russia and is up 8% in Barnaul (2012). We sought to describe socio-demographic and drug related risk factors among PWI recently diagnosed with HIV in Barnaul, Russia.

Methods A cross sectional survey among PWID using RDS was conducted between August and October 2012. PWID were recruited by 5 PWID "seeds." Blood specimens were collected for HIV and CD4 testing.

Results 500 PWID were surveyed. 251 respondents reported a prior HIV- test result. Of these, 61.2% (95% CI: 32.8, 85.0) reported their prior negative result was within the last 18 months, 53 PWID (20% (95% CI: 8.9, 29.1)) were HIV+. Median CD4+ count in HIV+ was 543 while in HIV- 841 cells mm³ (p = 0.0001). Subset of 251 PWID represented predominantly by: male (64.7%, 95% CI 53.1, 78.9), 30–39 years old (68.8%, 95% CI 51.4, 82.6), single (56.2%, 95% CI 36.5, 65.7), unemployed (74.5%, 95% 59.9, 85.8), first injection was at age < 14 (46.2%, 95% CI 26.2, 64.4). A majority injected in the last month (63.9%, 95% CI 51.5, 80.7) from ≥ 2 to ≤ 9 (74.8%, 95% CI 46.7, 96.2) times a day. Predominantly used drugs during the last month were heroin, marijuana (51.3%, 95% CI 35.1, 56.9), and desomorphine (27.9%, 95% CI 11.3, 37.6). 85.0% of PWID injected in a group with 1–5 injectors (95% CI 67.7, 96.5) with > 6 non-sterile injections (50.1%, 95% CI 26.0, 77.6) on average and 88.1% (95% CI 70.2, 97.1) shared paraphernalia. Prevalence of Hep C was 81.7% (95% CI 70.3, 90.3).

Conclusions Even with frequent testing, one fifth of PWID did not know their correct HIV status. This is likely attributable to