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

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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

P3.096

# HIV AND HCV PREVALENCE AND RISKY BEHAVIORS AMONG NEEDLE EXCHANGE PROGRAM USERS IN ALBANIA

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debut, active sexual life with frequent change of sexual partners,

casual sex and unprotected sex. More active sexual education within

**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

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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  $mm^3$  (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  $\geq$  2 to  $\leq$ 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 PIWD injected in a group with 1–5 injectors (95% CI 67.7, 96.5) with > 6non-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

this young age group is essential.

# **Poster presentations**

their frequent high risk exposures. HIV transmission among PWID appears to be occurring at a rapid pace. Essential interventions are needed to slow transmission.

P3.098

#### **TUBERCULOSIS AMONG HIV POSITIVE CASES IN UMN HOSPITAL TANSEN -WESTERN NEPAL**

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Background Human Immunodeficiency Virus infection has become a major public health problem worldwide. Tuberculosis (TB) is one of the most opportunistic infection (OI) among HIV infected patient. This study was conducted to study the prevalence of Opportunistic Infection TB among HIV positive patients visiting UMN Hospital Tansen, Palpa.

Methods HIV cases were diagnosed on the basis of rapid test kit HIV TRI DOT. TB cases were diagnosed on the basis of AFB staining, cultural methods, positive tuberculin test, radiographic abnormalities, and positive response to anti-tuberculous drugs.

**Results** A total of 8510 suspected HIV were included for the study. Of which, 81(0.95%) were found HIV positive. Out of 81 HIV infected patients, 80% (65/81) were Hospital OPD Patients and 16 (20%) were Hospital admitted In-Patient. Among 81 HIV infected patients, 28 patients were diagnosed as TB infection and 53 were without tuberculosis infection. Eighty six percent of TB cases were pulmonary tuberculosis (PTB) and 14% were extra-pulmonary tuberculosis. Out of 28 Co-infected HIV/TB cases, 75% were male and 25%were female. Of the 24 HIV/PTB Co-infected cases, 16 (66.6%) were sputum AFB positive pulmonary tuberculosis and 33.3% (8/24) were sputum AFB negative pulmonary tuberculosis. Out of 4 HIV/Extra-PTB co-infected patient,75%(3/4) were TB Meningitis and 25% (1/4) were Miliary TB, in which 3 male patients and a female patient. Conclusion: Infection of TB among HIV infected patients of this study were ranged in age from 25 years-50 years.

Key Words HIV, Opportunistic Infection (OI), Tuberculosis (TB), Pulmonary TB, Extra-PTB, AFB Positive, Tuberculous Meningitis (TBM), Miliary TB,

P3.099

## **SEX WORK AS AN EMERGING RISK FACTOR FOR HIV** SEROCONVERSION AMONG INJECTION DRUG USERS IN THE SURVUDI NETWORK

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Background Previous analyses of SurvUDI data have shown an emerging positive association between sex work and HIV incidence among injection drug users (IDUs).

Objective To characterise the association between sex work and HIV seroconversion among IDUs in the SurvUDI network between

**Methods** Participants who had injected in the past 6 months were recruited across the Province of Quebec and Ottawa, Canada,

mainly in harm reduction programmes. They completed a questionnaire and provided saliva for HIV antibody testing. Multiple visits were linked through an encrypted identifying code. The association between sex work (defined as reporting at least one client sex partner in the last six months) and HIV seroconversion was tested with a Cox proportional hazards model. Time-dependent covariables tested as potential confounders were age (< 25 vs. ≥ 25 years), sex, cocaine as the most often injected drug, injection with strangers, injection with a needle previously used by someone else, and consistent condom use (defined as always using a condom for vaginal and anal sex with casual, client and paid sex partners, with no sex partners as reference category). Covariables were retained as confounders when they changed the adjusted hazard ratio (AHR) by > 10% when removed from the complete model.

**Results** Sixty-four HIV seroconversions were observed during 3020 person-years of follow-up. In the final multivariate model, HIV incidence was significantly associated with sex work (AHR = 1.94, 95% CI: 1.09-3.46, p < 0.03) and injection with a needle previously used by someone else (AHR = 3.13, 95% CI: 1.88-5.22, p < 0.0001), adjusted for age. Sex did not modify the association with sex work. Conclusion Sex work is independently associated with HIV incidence among IDUs. Further studies are needed to understand whether this association is related to sexual transmission or if sex work is an intermediate variable between other unknown vulnerability factors and HIV transmission.

### P3.100 | FILLING THE KNOWLEDGE GAP: MEASURING HIV PREVALENCE AND RISK FACTORS AMONG POPULATIONS MOST VULNERABLE TO HIV IN LIBYA

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Background There has been no sound evidence on the status and dynamics of Libya's HIV-epidemic, which is urgently needed to inform near-term policy making while the window of opportunity to act is still open. With funding from the European Union we therefore aimed to assess HIV prevalence and related risk factors among populations most vulnerable to HIV.

Methods Using respondent-driven sampling, we conducted a cross-sectional survey among 328 people who inject drugs (PWID), 227 men having sex with men (MSM), and 69 female sex workers (FSW) in Tripoli. We collected behavioural data and blood samples for HIV, hepatitis C and B testing.

Results We estimated HIV-prevalence of 87% among PWID, 3% among MSM, and 16% among FSW. We detected high levels of IDUrelated, and sexual risk factors, in the context of strong stigma and lack of prevention programmes. Of particular concern, 85% of PWID reported having shared needles, only 21% of MSM used a condom at last sex, and 28% of FSW experienced STI symptoms during the last year. Over a third of MSM had risky sex with men and women and nearly a third of FSW had 50 or more sexual partners in the past six months.

**Conclusion** In this first bio-behavioural survey in Libya we detected among PWID one of the highest (or even the highest) levels of HIV-infection worldwide in the absence of a comprehensive harm-reduction programme. There is urgent need to implement an effective National HIV-Strategy informed by the results of this research, and designed to account for the overlap of high-risk sexual and drug-using networks. The risk of further transmission within different risk groups and to the general population is particularly high given the recent military events that led to increased violence, migration, and the disruption of essential HIV-related services and structures.