alternative sampling material for the study of HPV ecology in the male. We present the results from the first study on HPV detection in EPS, as detected using a reference method used at the WHO HPV LabNet global reference laboratory, a multiplex high-throughput genotyping using the Luminex system.

**Methods** The EPS samples were from 186 heterosexual men (mean age 32 (range 19–60) years (median sexual life start at 17.6 (9–25) years; 33 (1–500) median life-time sex partners; no concurrent STDs at the time of the study) were collected in a urology outpatient unit in St. Petersburg and tested for the presence of HPV DNA in Stockholm by the Luminex assay.

**Results** The results are presented in the Abstract LBP-1.07 table 1. HPV prevalence in the study population was 25.3% for all HPV types with 11.8% for oncogenic types only. High-risk (HR—) HPV 16 and 66 were the most common types 3.7 and 2.7% of men, respectively. Interestingly, untypable HR-HPV types were found in 3.2% of EPS samples. Multiple oncogenic types were found in 22.7% of all HR-HPV+ EPS samples.

**Conclusions** EPS can be used for HPV studies in men: additional investigation of EPS may result in better understanding the transmission of HPV infection and to develop strategies for HPV prevention. For the first time, the full range of HPV types in the EPS of men with no STDs was explored.

Abstract LBP-1.07 Table 1 HPV infection prevalence in the prostate (EPS) samples of 186 men

HPV types	Low-risk HPV types													Hiç	gh-ı	Untypable							
	6	11	42	43	53	67	70	74	81	87	89	91	M	ulti	16	18	31	35	45	56	58		
Men,	1	1	2	1	1	1	3	1	1	6	1	5	1	5	7	3	2	4	2	1	1	5	6 (3.2%)
HPV+	22 (11.8%)											21	21 (11.3%)										
	47 (25.3%)																						
Total	1	86																					

LBP-1.08

PRELIMINARY REPORT ON EXPERIENCE WITH POINT OF CARE SYPHILIS AND HIV TESTING IN HARD-TO-REACH POPULATIONS IN OUTREACH SETTINGS IN EDMONTON, CANADA

doi:10.1136/sextrans-2011-050119.14

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**Background** Edmonton is in the midst of a syphilis outbreak occurring largely in high risk and hard-to-reach populations. Point of care (POC) testing for syphilis and HIV offers the opportunity for immediate and rapid access to testing, and in the case of syphilis, immediate treatment. POC syphilis tests have not been previously evaluated in clinical settings in Canada.

**Methods** Since 14 February 2011, treponemal syphilis (Bioline Syphilis 3.0) and HIV (INSTI HIV-1/HIV-2 Antibody Test) POC testing, using whole blood from a finger prick specimen, has been offered to outreach clients in Edmonton. POC results were compared to standard testing from simultaneously collected serum specimens. Baseline demographics, sexual and drug use risk behaviour information were collected. Age and gender were collected on individuals who refused POC testing. A descriptive analysis was performed on the characteristics and outcomes of participants and those who refused.

**Results** As of 15 April 2011, 146 individuals had been offered POC testing; 85.6% (n=125) consented. Among participants, 59.2% (74)

were male [vs 66.7% (14) of non-participants, p=0.5)] and the median age was 29 yrs (IQR 24-36 yrs) [vs non-participants median age 29 yrs (IQR 25-45 yrs), p=0.2)]. The majority of participants (83.2%; 104) were heterosexual, 59.2% (69) were Aboriginal, and 30.4% (38) reported injection drug use. Among females, 62.7% (32) reported sex trade involvement, while among males, 21.6% (16) reported sex with a sex trade worker. Of 121 syphilis treponemal POC tests, 5 (4.1%) were positive, all in old treated cases of syphilis that were asymptomatic for infectious syphilis at the time of testing. Two syphilis POC (1.7%) tests were falsely negative when compared to the standard screening test (Architect Syphilis TP Microparticles, Abbott Laboratories, Illinois, USA); both were in individuals previously treated for syphilis. Of 123 HIV POC tests, 2 (1.6%) were reactive, both newly diagnosed cases as confirmed by GS HIV-1 Western Blot (BioRad Laboratories, California, USA); both were negative by syphilis POC tests.

**Conclusion** Preliminary results from Edmonton suggest that POC testing for syphilis and HIV is well accepted among high-risk populations in outreach settings in Edmonton. This ongoing study will assess the utility of these tests in mitigating the further spread of both syphilis and HIV through POC testing, and in the case of syphilis, POC treatment.

LBP-1.09

# SERVICES UTILISATION AND HEALTH RELATED VARIABLES OF PERSON LIVING WITH HIV/AIDS IN COMMUNITY IN TAIWAN

doi:10.1136/sextrans-2011-050119.15

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**Background** Non-profit organisation (NPO) is a major type to provide the services to response the needs for people living with HIV and AIDS (PLWHA) in the community in Taiwan. The purposes of the study were to describe the services and investigate the effect of the services utilisation of the services on health related variables for PLWHA

**Methods** Stratified random sampling and cross-sectional survey methods were used. The self-administered questionnaires include the Demographic, Utilisation and Satisfaction of the Non-Profit Organisation Services Questionnaire, CD4 count and virus load, Customised Adherence Self-Report Questionnaire, Beck Depression Inventory-II (BDI-II), and Medical Outcomes Study Short-Form Health Survey (SF-36) were used to collect date. In Utilisation and Satisfaction of the Non-Profit Organisation Services Questionnaire, the nine services form NPOs were generalised. Data were analysed using forward stepwise multiple regressions.

**Results** There were 202 study subjects (n=178, 88.1% male) and the mean age was 42.54 (SD 10.44) years. The mean virus load and CD4 count were 11 031.07 (SD 67 153.41) m/l and 425.03 (SD 209.30) mm<sup>3</sup>. The total number of service types which had had accepted by participants was 4.65 (SD 1.67). The services with highest number of users were group or activities (n=174, 86.1%) and counselling (n=137, 67.8%). Of the 137 participants who had used the counselling service, 126 (92%) will keep using counselling service. The result indicated that higher frequency of financial aid and counselling services were predictive to the lower depression level of BDI-II (F=17.51, R2=0.60, p=0.001). Higher frequency of access for medical care service could predict the higher adherence rate to cART of Customised Adherence Self-Report Questionnaire (F=6.85, R2=0.41, p=0.013). Higher frequency of access for medical care service and higher adherence rate for cART were collaboratively the predictors to the higher CD4 count (F=17.24, R2=0.55, p=0.009). The service of access for medical care, BDI-II, and CD4 were significant with quality of life for SF-36 (F=17.31, R2=0.66, p<0.000).

### Late breaker abstracts

**Conclusions** The utilisations of financial aid, counselling, and access for medical care services that provided by NPO in Taiwan were significantly with the health related variables which included the depression, adherence, CD4, and quality of life. The result could provide suggestions about refining the contents of services and promoting their function and the quality of life of PLWHA.

### LBP-1.10

## MISCLASSIFICATION OF SYPHILIS CASES USING A REACTIVE ENZYME IMMUNOASSAY AND REACTIVE RPR ALGORITHM ALONE FOR DIAGNOSIS

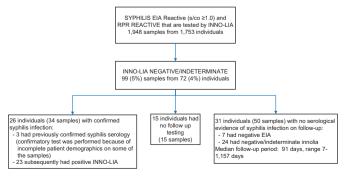
doi:10.1136/sextrans-2011-050119.16

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**Background** Recent recommendations propose that samples dually reactive by a syphilis enzyme immunoassay (sEIA) and RPR be reported as positive for syphilis without confirmatory testing.

**Methods** Samples from 1 September 2007 to 19 March 2011 testing reactive by sEIA and tested by INNO-LIA (IL) were extracted from the Alberta Provincial Laboratory for Public Health's DIAL (Data Integration for Alberta Laboratories), a web based application. Syphilis testing history was reviewed for all patients with a reactive sEIA and reactive RPR and negative (NEG) or indeterminate (IND) result by IL. Syphilis infection was defined by a positive confirmatory test (majority IL; a few TPPA and FTA-ABS). The significance of RPR titres in patients NEG/IND by IL with or without evidence of syphilis infection was analysed using  $\chi^2$  test. Median standard cut-offs (s/co) for the sEIA were compared using the Mann—Whitney U test.

Results 6195 samples from 4695 patients with reactive sEIA were also tested by IL: 15 samples (0.2%) had no reported RPR result. 4232 (48.3%) were non-reactive by RPR, and 1948 (31.4%) samples from 1753 patients were reactive by RPR. 72 (4.1%) of the 1753 patients with reactive RPR had at least one specimen tested NEG/ IND by IL (Abstract LBP-1.10 figure 1). 3 of the 72 patients (4.2%) had a serological history of syphilis infection not recognised initially, 15 (20.8%) had no follow-up testing, 23 (31.9%) had a subsequent positive IL, and 31 (43.1%) did not demonstrate syphilis infection on follow-up testing. For the 31 patients with no serological evidence of syphilis infection, 24 remained NEG/IND by IL and seven tested negative by sEIA on follow-up. Overall, 31 patients (1.7%) would have been misclassified as infected based upon an algorithm of dually reactive sEIA and RPR without confirmatory testing. 14.7% of samples that tested negative or IND for IL in confirmed syphilis had RPR titres =1:8 as compared to 20.0% of samples from patients without syphilis on follow-up serology (p=0.5). The median s/co of the screening sEIA for samples from the patients who were infected



Abstract LBP-1.10 Figure 1 Misclassification syphilis cases

(4.8, range: 1.0-24.20) differed from the s/co (2.6, range: 1.0-12.4) for those uninfected (p<0.05).

**Conclusions** In our experience, 1.7% (31 patients) would have been misclassified as a case of syphilis if a third confirmatory test for syphilis had not been conducted. Additional evaluation of syphilis testing algorithms is warranted before a two test algorithm is widely employed.

### LBP-1.11

# ACCEPTABILITY OF SHORT-COURSE AZT PREVENTION REGIMEN BY HIV INFECTED PREGNANT WOMEN; SHOULD VCT IN THE ANTENATAL SETTING BE MODIFIED

doi:10.1136/sextrans-2011-050119.17

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**Background** Acceptability VCT by pregnant women is critical in the contest of trials accessing interventions to reduce mother to-child transmission of HIV. We studied the logistics and uptake of short—course oral AZT regimen by HIV-infected women after VCT in areas of Uganda.

**Methods** From June 2004, a pilot project on the feasibility of short-course AZT was launched in an antenatal clinic in mulago hospital. All pregnant women hear a 15- min talk by clinic nurses a bout mother to- child transmission of HIV and are offered voluntary pre-and post-test counselling by lay community volunteers. Consenting HIV-positive women are offered AZT (300 mg twice daily) from 36 weeks gestation until labour, one tablet at onset of labour, and then every 3 h delivery. HIV positive women are counselled and supported on their choice of infant.

**Results** Over a 6-month period, 1062 antenatal women were offered VCT, 247 (22%) underwent pre-test counselling and 206 (18%) agreed to be tested. Among those tested 78 (38%) were HIV-positive, of these 17(83%) returned to collect results, including 65 HIV positive women. As of September 2004, 40 (62%) women consented for AZT, 17 women have completed the regimen, 5 are currently receiving drug, 7 are eligible to start AZT and 11 women dropped out of the study (preterm births, incorrect dates, failure to notify nurses during labour, and non-compliances). Of the 17 women who received AZT, 12 opted for formula feeding and five women chose breast feeding.

**Conclusion** HIV prevalence in this setting is estimated at 30% of 332 projected HIV infected women seen, only 40(12%) women actually received AZT. The major barrier appears to be entrance into counselling. When counselled, most HIV-pregnant women choose to receive AZT prophylaxis. New approaches to antenatal HIV counselling and testing are urgently required to improve future acceptance of VCT and the successful implementation of antiretroviral pro-phylaxis.

#### LBP-1.12

HIV AND HEPATITIS C PREVALENCE IN INDIVIDUALS LEAVING PRISON AND ENTERING DRUG AND ALCOHOL SERVICES IN THE AREA OF HIGHEST HIV PREVALENCE IN THE UK

doi:10.1136/sextrans-2011-050119.18

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**Background** Intravenous drug users, particularly those in prison, are at high risk of acquiring HIV and Hepatitis C (HCV) and commonly do not access mainstream medical care. Missed opportunities for HIV and Hepatitis C testing in Intravenous drug users attending prisons are therefore common. By using oral swabs difficulties of venous access can be avoided. Lambeth has the highest prevalence of