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Background Detection of sexually transmitted infections (STIs) in HIV-1 positive (+) men is essential to ensure appropriate treatment and to reduce HIV and STI transmission. We evaluated the baseline prevalences of *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (NG), *Trichomonas vaginalis* (TV), *Mycoplasma genitalium* (MG) and high risk human papillomavirus (HR-HPV) infections in HIV-1+ men.

Methods HIV-1(+) men from three southern California (CA) sites (n = 179) and from one New York (NY) site (n = 254) were screened using APTIMA TMA assays (Hologic/Gen-Probe Inc.) for CT, NG, TV, MG, HR-HPV (with HR-HPV genotyping for HPV-16 and HPV-18/45). Specimen types tested (1–3 per subject) were collected between 11/2010 and 9/2012 and included urine for CT (n = 356), NG (n = 357), TV (n = 357), MG (n = 357), throat for CT (n = 86), NG (n = 178), TV (n = 172), MG (n = 179), HR-HPV (n = 172) and rectal for CT (n = 263), NG (n = 263), TV (n = 255), MG (n = 263), HR-HPV (n = 251). Prevalences were calculated by patient and by specimen types.

Results Overall, 218/433 (50.4%) of the subjects were positive for an STI; 6.2% having > 1 STI; 4.9% had 2 STIs (HPV/MG, HPV/CT, HPV/NG, MG/CT, MG/NG, CT/NG), and 1.4% had 3 STIs (HPV/MG/CT, HPV/MG/NG, MG/CT/NG). Pathogen prevalence by specimen site and patient are listed below:

Abstract P3.244 Table 1

By Specimen	Pathogen Prevalence (%)					Any STI
	CT	NG	TV	MG	HPV	
Rectal	4.6	3.8	0.0	7.6	55.8	14.1
Urine	0.8	0.3	0.0	4.5	Not tested	1.4
Throat	3.5	2.8	0.6	1.7	4.7	2.3
By Patient	4.2	3.5	0.2	8.8	55.7	50.4

Genotyping of 127 HR-HPV+ specimens determined that 25.2% contained HPV-16; 10.2% HPV-18/45, 6.3% HPV-16 and HPV-18/45, and 58.3% were negative for HPV-16, 18 or 45.

Conclusions The overall high prevalence of STIs, often multiple STIs per individual, suggests the need to expand screening for multiple STIs in all anatomic sites. Rectal specimens demonstrated the most STIs, especially HPV. Mycoplasma, a pathogen that is not usually tested for, was the most common bacterial STI.

P3.245 SEXUALLY TRANSMITTED INFECTIONS (STI) IN HIV-POSITIVE PATIENTS IN THE AUSTRALIAN HIV OBSERVATIONAL DATABASE (AHOD)- A PROSPECTIVE COHORT STUDY - RATIONALE AND RESULTS AT BASELINE

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Background STI may be markers of at-risk sexual behaviours, and in persons with HIV probably also increase infectiousness and risk of HIV transmission, even with viral suppression by antiretroviral drugs (ARV). However, estimates of STI in this group have proved problematic, and there are few longitudinal studies able to accurately measure incidence.

Methods In 2010, we established a cohort of individuals from ten sexual health clinics that were already enrolled in AHOD. We calculated diagnosis rates for four STI (Chlamydia, gonorrhoea, infectious syphilis, anogenital warts) from 2005–2010, and true incidence rates from 2010–2011.

Results At baseline (2010), the cohort (n = 520) did not differ markedly from the rest of AHOD (n = 1668). There was a gradual increase in chlamydial infections, from 3.4/100person-years(py) (95% CI 1.9–5.7) in 2005, to 6.7/100py (95% CI 4.5–9.5) in 2011, with a substantial peak in 2010, 8.1/100py (95% CI 5.6–11.2). The cases were evenly distributed between urethral (49%) and rectal (51%) infections. Similarly, gonococcal infections increased, with a peak in 2010 (4.7/100py, 95% CI 5.6–11.2), but rectal (63%) outnumbered urethral (37%) infections. Infectious syphilis showed several peaks, the largest in 2008 (5.3/100py, 95% CI 3.3–8.0). The incidence of genital warts declined from 7.5/100py in 2005 (95% CI 4.8–11.3) to 2.4/100py in 2011 (95% CI 1.1–4.5).

Conclusions The incidence of chlamydial and gonococcal infections, and infectious syphilis was higher than previous estimates in Australia. The incidence of genital warts was lower. Ongoing incidence data will assess relationships between STI, HIV-viral load, immunodeficiency, ARV and STI treatment, and patient characteristics.

P3.246 PREVALENCE OF STI/HIV AND ASSESSMENT OF RISKY BEHAVIOURS AMONG SEX WORKERS

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Background HIV biological and behavioural surveillance has been conducted repeatedly in Armenia starting from the year of 2002. The most recent STI/HIV integrated biological and behavioural surveillance (IBBS) was conducted in Armenia in 2012. Populations for conducting the surveillance were defined depending on the epidemiological situation, and current data on HIV prevalence in different populations. Sex workers (SWs) were involved in this surveillance.

Methods IBBS among SWs was conducted in three biggest cities of Armenia, respondent driven sampling (RDS) was used. The sample size in Yerevan, capital was 300 with mean age of 35.5.

Results HIV prevalence among SWs in Yerevan was 1.3%, syphilis - 4.3%, trichomoniasis - 22.5%, gonorrhoea - 6.6%.

The indicator of knowledge about HIV prevention was 35.4% (34% in 2010). Condom use with non-commercial partners was low. Only 40% of SWs (30.1% in 2010) used condoms at last sex with non-commercial partners, and 27.4% (30.8% in 2010) used condoms consistently. 90% of SWs (92.9% in 2010) used condoms at last sex with clients and 80% (88.5% in 2010) used condoms consistently.

67.8% of SWs had sex with non-commercial partners in the past 1 year. On average, one SW has 4.8 clients per week, 18 clients per month.

The percentage of SWs tested for HIV in the past 12 months was only 37.5%. Percentage of SWs exposed to HIV prevention programmes made 49.2%.

Conclusion Condom use with non-commercial partners was rather low among SWs, which creates a risk of further spread of HIV infection not only within this group, but also outside it. Though HIV prevalence among SWs was comparatively low, STI prevalence among them was high, which proves their risky behaviour. As appears from the above, the services on HIV prevention and STI management for SWs should be expanded and optimised.

P3.247 SYNDROMIC APPROACH OF STI CASE MANAGEMENT AND TREATMENT STRENGTHENING THE NATIONAL STI PROGRAMME AND HIV PREVENTION EFFORTS IN KSA

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