

Conclusions We found that in patients with urogenital Chlamydia infection positive reactions could be detected with high frequency at extragenital sites by both PCR and antibody-based assays. Thus, testing clinical specimens obtained from extragenital sites can facilitate detection of Chlamydia, resulting in a significant increase of the efficiency of laboratory diagnosis of Chlamydia for Public Health.

This work was supported by the Project #3846 NIH/BTEP/ISTC.

P.03 - Epidemiology and Prevention Sciences Track

P3.001 PATTERNS OF RECENT ALCOHOL AND MARIJUANA USE AS PREDICTORS OF CONDOM USE, PREGNANCY AND SEXUALLY TRANSMITTED INFECTIONS DURING 18-MONTHS OF FOLLOW-UP AMONG AFRICAN-AMERICAN FEMALE ADOLESCENTS

doi:10.1136/sextrans-2013-051184.0461

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Background Few, if any, studies have differentiated patterns of alcohol and marijuana use as predictors of sexual risk among adolescents. The objective was to compare recent use of alcohol and marijuana (A+M), alcohol only (AO) and marijuana only (MO) as predictors of condom use, pregnancy and sexually transmitted infections (STIs) during 18 months of follow-up among African-American female adolescents.

Methods The analytic sample included 213 African-American females (14–20 years) assigned to the control arm of an HIV prevention trial. Participants completed audio computer-assisted self-interviews at baseline and every 6 months for 18 months. At each assessment, a pregnancy test was conducted and specimens were collected and assayed for *Trichomonas vaginalis*, *Chlamydia trachomatis* and *Neisseria gonorrhoeae* using DNA amplification. Generalized estimating equations compared proportion condom-protected sex acts in the past 3 months, pregnancy and STI acquisition during follow-up among participants who in the 90 days prior to baseline assessment reported using A+M, AO and MO but no other illegal substances. Multivariable models controlled for group differences at baseline and corresponding baseline measure of the outcome.

Results Of 182 (85%) participants with follow-up data, 43% (n = 79) reported recent use of A+M, 39% (n = 71) AO and 17% (n = 32) MO. No group differences in retention or proportion condom-protected sex acts during follow-up were observed. There were no significant differences in STI acquisition or pregnancy among MO and AO users. Relative to AO users, A+M users were more likely to become pregnant (AOR: 2.5, 95% CI: 1.2, 5.3). Relative to MO users, A+M users were more likely to acquire an STI (AOR: 2.5, 95% CI: 1.0, 6.2) and become pregnant (AOR: 3.7, 95% CI: 1.1, 12.3).

Conclusion STI/HIV and pregnancy prevention programmes serving African-American female adolescents may benefit by intensifying services for recent A+M users and addressing the role of substance use on sexual risk.

P3.002 DETECTION OF HUMAN PAPILLOMAVIRUS (HPV) INFECTION IN ANAL SAMPLES IN RUSSIAN MEN WHO HAVE SEX WITH WOMEN (MSW)

doi:10.1136/sextrans-2013-051184.0462

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Background HPV has been found in the anal canal of heterosexual men (MSWs) but knowledge on anal HPV epidemiology among MSWs is still limited.

Methods In total, B-globin positive anal samples from 350 Russian MSWs (age 18–58 years, sex debut 9–23 years, 1–700 life-time sex partners) attending a urology unit of a STI clinic and HIV+ patients from a city infection hospital were collected in St. Petersburg. HPV testing and genotyping for 13 oncogenic and 23 non-oncogenic HPV types was conducted with a reference method from the WHO HPV LabNet global reference laboratory, using a proficient Luminex assay.

Results Overall HPV prevalence (including oncogenic and non-oncogenic types) was 17.1%, 15.2% in HIV- compared to 40.7% in HIV+ Russian MSW (p = 0.0022). HPV 16 infection was most common (5.4%) followed by HPV 51 (2.0%), HPV 45, (1.7%) and 87 (1.7%). Age, number of sexual partners, and age at sexual debut were not associated with HPV infection.

Conclusion HPV infection is common in anal samples of Russian MSWs. HPV prevalence is higher among men who were HIV-positive.

P3.003 HETEROSEXUAL ANAL INTERCOURSE AMONG YOUTH: A SYSTEMATIC REVIEW AND METAANALYSIS

doi:10.1136/sextrans-2013-051184.0463

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Background Anal intercourse (AI) is a risk factor of HIV/HPV infection and anal cancer. However, heterosexual AI practises are ill-understood. Our objective was to understand the level and heterogeneity in AI among heterosexual youth

Methods We conducted a systematic review and meta-analysis. PubMed was searched for studies reporting heterosexual AI among the general population with a mean age < 25 years published 1975–2012. Meta-analysis and meta-regression were used where appropriate to summarise estimates and test whether continent, survey year, mean age and interview method explained variation in AI prevalence among sexually active and all youth.

Results 110 eligible studies were identified from North America (n = 75), Europe (14), Africa (13), Latin America (4) and Asia (4). Studies of AI prevalence over lifetime (n = 66) and 3 months (n = 16) only are reported here. Both lifetime and three-month AI prevalence estimates were too heterogeneous to pool (I² > 90%).

Lifetime AI prevalence was 0.2%–55.7% and 0.0%–38.8% in sexually active and all youth, respectively. AI among all youth increased significantly (p ≤ 0.05) with mean age. Among sexually active youth, interview method explained 12% and 47% of variation in AI prevalence in male/mixed gender samples, respectively. Higher prevalence was reported using more confidential methods. Lifetime prevalence increased significantly with survey year among all gender groups in Europe, but not elsewhere.

Three-month AI prevalence was 5.1%–52.6% and 1.3%–22.7% in sexually active and all youth, respectively. Among all youth, mean age explained 76% and 80% of variation in female and mixed AI prevalence, respectively. Three-month prevalence increased significantly with survey year in sexually active female samples (all from North America).

Conclusion AI is common among all young heterosexual populations, with prevalence increasing in Europe and possibly among females in North America. It could therefore become an increasingly important determinant of HIV and HPV transmission.

P3.004 STANDARD SYMPTOM- AND SEXUAL HISTORY-BASED TESTING MISSES OVER HALF OF ANORECTAL STD IN WOMEN VISITING THE STD CLINIC

doi:10.1136/sextrans-2013-051184.0464