

incident HIV cases nationwide (2008). Although *Trichomonas vaginalis* (TV) infection has been associated with an increased risk of HIV acquisition in women, the prevalence of TV in Miami is unknown due to lack of routine screening and low sensitivity testing methods. The purpose of this study is to establish a prevalence of TV in women seeking services at the Miami-Dade County Health Department Downtown STD Clinic compared to the prevalence of routinely screened STDs, gonorrhoea (GC) and Chlamydia (CT).

**Methods** This study analyses baseline data from the Miami site of Project AWARE which is a multi-centre randomised clinical trial that seeks to test the effectiveness of risk reduction counselling in preventing sexually transmitted infections including HIV among HIV-negative persons. Eligibility criteria for Project Aware included negative or unknown HIV status, age of 18, and ability to provide informed consent. We recruited 251 women aged 18–64 for STD screening. The screen included FDA-approved Aptima GC/CT NAAT (nucleic acid amplification test) and a newly validated Aptima TV NAAT. Specimens were collected by vaginal swab performed either by a clinician or the patient. Additionally, we report the TV diagnoses given the current clinic protocol in which only symptomatic women received a wet mount analysed by light microscopy. We use descriptive statistics to report the prevalence of GC, CT and TV (as diagnosed by NAAT and wet mount) in our clinic.

**Results** Of the 251 women in our study, 163 high-risk populations. Received a wet mount. By wet mount, we found a 9% prevalence of TV in our patients. Comparatively, when all 251 patients were screened using NAAT, the TV prevalence was 20%. The prevalence of CT was 14% and GC was 6%.

**Conclusions** TV is the most prevalent STD in patients in our clinic which draws upon high-risk individuals in urban Miami. TV infections were greater than CT, often believed to be the most prevalent STD in our population. Further, the routine screening using the TV NAAT detected 27 cases of TV that would have been undiagnosed given current clinic protocol. Since Miami, FL has the highest prevalence of HIV in the country and TV infection has been linked to new HIV infection, we believe that routine TV screening by NAAT should be instituted in high-risk populations.

**P1-S1.12** AGE-SPECIFIC INCIDENCE OF CHLAMYDIA, GONORRHOEA, AND TRICHOMONIASIS INFECTION IN ADOLESCENT WOMEN

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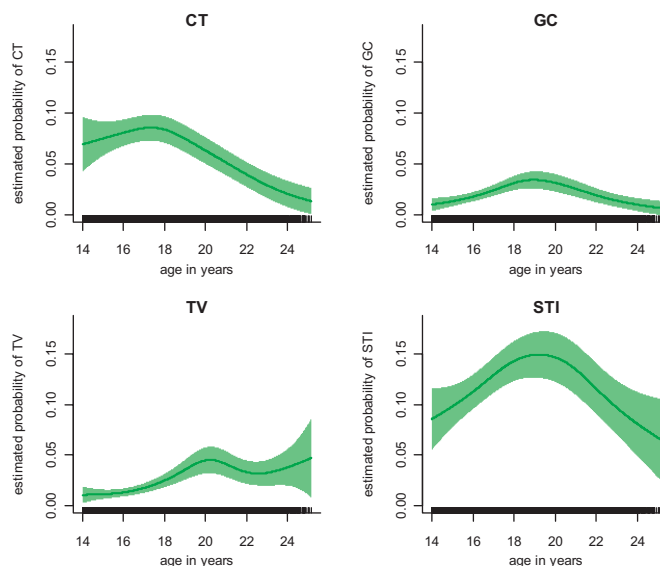
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**Background** Age-specific incidence rates of sexually transmitted infections (STI) with *Chlamydia trachomatis* (CT), *Neisseria gonorrhoeae* (GC), and *Trichomonas vaginalis* (TV) are not well characterised in adolescents and young adult women. In this research, we described the CT, GC, and TV incidence rates in young women as functions of age.

**Methods** Young women aged 14 and 17 were recruited from three adolescent medicine clinics in Indianapolis, Indiana. Study participants were followed longitudinally for up to 8.2 years. Participants were tested for CT, GC, and TV at the time of enrolment, and at subsequent quarterly visits. Infected individuals were treated at or shortly after each visit. We analysed the longitudinally measured incidence infections with CT, GC, and TV using generalised additive mixed effect models (GAMM) with a logit link for binary outcomes. The age effect on STI incidence was modelled as a smooth non-linear function in the GAMM analysis and a random subject effect was included to accommodate the correlations among repeated STI

assessments within each individual. Estimated incidence rates (with 95% CIs, in colour) for each organism were reported as smooth functions of age.

**Results** The cohort included 386 young women. The average age at enrolment of study participants was 15.3 years (SD=1.1 years). A majority (89.1%) of study participants were African-American. The average age at first sexual intercourse was 14.2 years (SD=2, median=14 years). The mean cumulative number of sexual partners measured at the time enrolment was 3 (SD=4, median=2). The average length of follow-up was 3.5 years (SD=2.2 years). Baseline prevalence rates were 10.9%, 4.4% and 6.0% for CT, GC, and TV, respectively. The age-specific incidence rates for the three organisms and any STI are seen in the Abstract P1-S1.12 figure 1.



Abstract P1-S1.12 Figure 1 WTU.

**Conclusions** The estimated STI incidence rates clearly differ by organisms, not only in magnitude but also in peak age. While the prevalence rates of the respective organisms in the partner population may be a contributor to the differential risk of STI acquisition, the fact that such differences were observed from the same group of individuals with the same sexual partners and sexual behaviours raises questions about age-related differences in susceptibility to infection by the three organisms.

**Epidemiology poster session 1: STI trends—HIV**

**P1-S1.13** HETEROGENEITY OF THE HIV EPIDEMIC IN THE GENERAL POPULATION OF KARNATAKA STATE, INDIA

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**Background** In the context of AVAHAN—The India AIDS Initiative of the Bill and Melinda Gates Foundation, general population surveys (GPS) have been carried out in three Karnataka districts in India. Given the north-south gradient already observed in HIV