for prescribed variables in the model and assessed for quality using the EPI-review tool. The review included an analysis of methodologies, questionnaires, recruitment strategies and raw data used in and generated by previous studies.

The TWG found approximately 50% of the data needed for use in the MOT study. Methodological issues with data collection activities were identified, key questions used in population-based studies were modified and reconstructed, and formal population size estimations were recommended.

The review generated substantive recommendations to enhance future data collection activities and improve programming. Stakeholder awareness about limitations of available data and the types of studies/data needed to help better understand the epidemic and determine appropriate responses. Periodic reviews of data availability and quality are critical to knowing your epidemic and the most appropriate response.

The EPI-review tool increased stakeholder’s awareness about the limitations of the available data and the types of studies/data needed to help better understand the epidemic and determine appropriate responses. This capacity building effort generated substantial recommendations to enhance future data collection activities. The tool saved time and effort at the country level by focusing on the data needed to conduct the MOT.

**P3.231 STUDY DRUG INTERRUPTION AMONG HIV SERODISCORDANT COUPLES IN PARTNERS PREP STUDY, THIKA-KENYA**


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**Background** For successful implementation of PrEP as a HIV prevention strategy, participant’s adherence to the intervention is vital. Frequent interruption of study drug, impacts its effectiveness negatively. We documented the frequency and causes of study drug interruptions among participants enrolled in the Partners PrEP Study, Thika-Kenya.

**Methods** Between October 2008 and November 2010, we enrolled 496 HIV serodiscordant couples who were followed up to 36 months. We categorised time off study drug into two; protocol-defined, in which the parameters of withholding study drug was clearly outlined in the study protocol and participant-initiated interruption where the participant opted to stop taking study product was 90 (IQR 28, 268) days. Age, gender and education; diagnosis and management of sexually transmitted infections (STIs). Pap smear reporting included the Bethesda classification for cervical lesions. We describe the prevalence and incidence of genital tract abnormalities in TB-HIV co-infected women initiating ART in Durban, between 2004 and 2011. All patients received sexual reproductive health services including a Papanicolaou (Pap) smear examination; and screening, diagnosis and management of sexually transmitted infections (STIs). Pap smear reporting included the Bethesda classification for endocervical abnormalities, and STI screening for Human papilloma virus (HPV), trichomonas vaginalis, bacterial vaginosis (BV) and candidiasis.

**Results** Baseline pap smears were obtained before or up to 6 months post-ART initiation in 750 women; mean (standard deviation(SD)) age 34.2 (8.0) years; mean CD4+ count 181.4 (SD 178.5) cells/mm³ and median log viral load 4.4 (IQR 2.6) copies/ml. Prevalence of genital tract abnormalities was 58.5% (459/750);
comprising 18.0% (135/750) cervical lesions only, 11.7% (88/750) STI's only and 28.8% (216/750) both STI's and endocervical lesions. No abnormalities were detected in 19.9% of women (149/750), while results from 21.6% (162/750) were missing. STI prevalence was 40.5% (304/750); comprising HPV 20.0% (150/750), candidiasis 16.1% (121/750), BV 7.9% (59/750), trichomoniasis vaginals in 5.5% (41/750). Prevalence of endocervical abnormalities was 46.8% (351/750); comprising Atypical Squamous Cells of Unknown Significance (ASCUS) 10.1% (76/750), Cervical Carcinoma (CACC) 0.5% (4/750) and High (HGSIL) and Low (LGSIL) grade Squamous Intra-epithelial Lesions of 12.1% (91/750) and 24.0% (180/750), respectively. The incidence HPV in this cohort was 24.8 per 100 women years (95% CI: 15.7 to 37.2), incidence of ASCUS 7.8, HGSIL 11.1, LSI 25.9, and CACC 0 per 100 women years, respectively. HPV was present in 19.2% of LSIIL, 0.4% of HGSIL, 0.1% of patients with ASCUS and CACC.

**Conclusion**
HPV infections and LGSIL were the dominant genital tract abnormalities in TB-HIV co-infected patients accessing ART.

**P3.234** PREVALENCE AND ESTIMATED HIV-1 INCIDENCE AT TWO VOLUNTARY COUNSELING AND TESTING CENTERS IN NORTHEAST OF BRAZIL


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**Background**
Estimates of incidence and prevalence are important tools for the investigation of regional trends of the HIV epidemic. Currently, the use of immunoassays for epidemiology investigation is referred by RITA (Recent Infection Testing Algorithm). This study aimed to determine the prevalence HIV-1 incidence in two Voluntary and Counseling Testing (VCT) Centers, in the Metropolitan Region of Recife - Northeast of Brazil, in the period from 2008 to 2009.

**Methods**
Demographics and behavioural data were obtained from 245 individuals diagnosed as HIV-positive among 19,451 volunteers screened from January 2008 to December 2009. The BED - CEIA was used for the determination of recent infection and estimate HIV-1 incidence.

**Results**
HIV-1 prevalence was 1.3% (95% CI: 1.14 to 1.46) and the corresponding HIV-1 estimated incidence was 0.71% /year (95% CI: 0.53–0.89). The males obtained a higher prevalence (2.6%, 95% CI: 2.13 to 3.07) and incidence (1.29%/year, 95% CI: 0.79–1.79) than females, whose prevalence was 0.8% (95% CI: 0.62 –0.98) and the incidence rate was 0.52%/year (95% CI: 0.34–0.70). A high rate of recent infection was observed in both genders (male: 25% female: 29.9%).

**Conclusions**
Our study shows a high rate of recent infection for HIV-1 in genders, as well as a high prevalence and incidence among males, indicating that prevention strategies in this population should be intensified.

**P3.235** GLOBAL ECOLOGICAL STUDY OF HIV AND HSV-2 PREVALENCE


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**Background**
HIV and herpes simplex virus type-2 (HSV-2) are infections transmitted predominantly through sexual intercourse. We explored the ecological association between the prevalence of HIV and HSV-2 among human populations through a global review.

**Methods**
We conducted a global systematic literature review of HIV and HSV-2 prevalence following the PRISMA guidelines. Sources of data used were Medline (PubMed) and Embase databases, and several country-level reports. No language, country, or year limitations were imposed. We included any publication with a serological measurement of HIV and HSV-2 prevalence in the same study population.

**Results**
A total of 2,927 records were screened. Based on preliminary descriptive analysis, we found that HIV prevalence increased steadily with HSV-2 prevalence in all populations where the dominant mode of transmission was sexual. HSV-2 prevalence was consistently larger than HIV prevalence. Overall, among high-risk populations, both infections prevalence was high. Among general population groups, HIV prevalence varied across settings, but was correlated with HSV-2 prevalence, which also varied widely. Though HIV and HSV-2 prevalence levels were correlated across populations, there were settings with very low HIV prevalence regardless of HSV-2 prevalence. For children and injecting drug users where the dominant mode of HIV transmission was not sexual, there was no apparent ecological association between the two infections.

**Conclusions**
Our findings support a strong ecological association between HIV and HSV-2 prevalence in all populations where the dominant mode of HIV transmission is sexual. Sexual networks conductive of HSV-2 transmission appear to be also conducive of HIV transmission. Further analytical work is needed to quantify the ecological association between the two infections, to determine whether HSV-2 could be predictive of HIV epidemic potential, and to assess whether there is a threshold of HSV-2 prevalence necessary for a sexual network to be sustainable for HIV transmission besides HSV-2 transmission.