

**P2.18 THE VALUE OF LIGHT MICROSCOPY TO DIAGNOSE UROGENITAL GONORRHOEA IN INDONESIAN CLINIC-BASED AND OUTREACH SEXUALLY TRANSMITTED INFECTIONS SERVICES**

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**Introduction** Gonorrhoea is a common sexually transmitted disease caused by *Neisseria gonorrhoeae* (Ng) infection. Light microscopy of urogenital smears is used as a simple tool to diagnose urogenital gonorrhoea in many resource-limited settings. We aimed to evaluate the accuracy of light microscopy to diagnose urogenital gonorrhoea as compared to a PCR based test.

**Methods** In 2014, we examined 632 male urethral and 360 endocervical smears in clinic-based and outreach settings in Jakarta, Yogyakarta and Denpasar, Indonesia. Using the detection of Ng DNA by a validated PCR as reference test, we evaluated the accuracy of two light microscopic criteria to diagnose urogenital gonorrhoea in genital smears: 1) the presence of intracellular Gram negative diplococci (IGND) and 2)  $\geq 5$  polymorphonuclear leukocytes (PMNL)/oil-immersion field (oif) in urethral, or  $>20$  PMNL/oif in endocervical smears.

**Results** In male urethral smears, IGND testing had a sensitivity, specificity, and kappa of respectively 59.0%, 89.4%, and 0.49. For PMNL count these were respectively 59.0%, 83.7%, and 0.40. The accuracy of IGND in the clinic-based settings (respectively 72.0%, 95.2%, and 0.68) was better than in the outreach settings (respectively 51.2%, 83.4%, and 0.35). In endocervical smears, light microscopy performed poorly regardless of the setting or symptomatology, with kappas ranging from 0.09 to 0.24.

**Conclusion** Light microscopy using IGND and PMNL criteria can be an option with moderate accuracy to diagnose urethral gonorrhoea among males in a clinic-based setting. The poor accuracy in detecting endocervical infections indicates an urgent need to implement advanced methods, such as PCR. Further investigations are needed to identify the poor diagnostic outcome in outreach services.

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**P2.19 PERIODICPRESUMPTIVE TREATMENT FOR VAGINAL INFECTIONS DOES NOT IMPACT THE INCIDENCE OF HIGH-RISK SUBTYPES OF HUMAN PAPILLOMA VIRUS: A SECONDARY ANALYSIS FROM THE PREVENTING VAGINAL INFECTIONS TRIAL**

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**Introduction** Evidence suggests that women with bacterial vaginosis (BV) are at increased risk for infection with high risk

sub-types of human papilloma virus (hrHPV). Among women participating in a randomised trial of periodic presumptive treatment (PPT) to reduce vaginal infections including BV, we previously reported reductions in bacterial STIs among women receiving PPT compared to placebo. In the current analysis, we assessed the effect of PPT on acquisition of HR-HPV among Kenyan women enrolled in the trial.

**Methods** Nonpregnant, HIV-uninfected women aged 18–45 from Kenya and the United States were randomised to receive intravaginal metronidazole 750 mg plus miconazole 200 mg or matching placebo for 5 consecutive nights each month for 12 months. Genital specimens were collected every other month. Following completion of the trial, enrollment and follow-up specimens from participants at the three sites in Kenya were tested for hrHPV (types 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, and 68) using the Hologic APTIMA HPV assay. Poisson regression models were used to assess the intervention effect on hrHPV incidence and time to first detection of hrHPV.

**Results** Among 176 Kenyan women participating in the trial, 168/176 (95%) had specimens available for analysis (intervention n=84; placebo n=84). Baseline hrHPV prevalence was 17% (n=29) and similar by arm. Among participants without detectable hrHPV at enrollment, 26 participants had hrHPV detected during 114.6 person-years (incidence=22.7/100 person-years), with similar incidence in the intervention versus placebo arm (21.7/100 person-years versus 23.6/100 person-years; incidence rate ratio [IRR]=0.92, 95% CI 0.42, 1.99).

**Conclusions** This intervention, which significantly reduced BV over 12 months, did not impact acquisition of hrHPV. However, the high incidence of hrHPV provides evidence in support HPV vaccination efforts in this region.

**P2.20 MALE PARTNER LINKAGE TO CLINIC-BASED STI/HIV SERVICES FOLLOWING A HOME-BASED COUPLE ANTENATAL EDUCATION AND TESTING INTERVENTION IN WESTERN KENYA: A RANDOMISED CONTROLLED TRIAL**

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**Introduction** Offering couples education and HIV rapid testing during pregnancy can increase testing of male partners, identify sero-discordant couples, and help link men to HIV care services. We aim to understand how a home-based antenatal couple HIV testing intervention affects male partner follow-up to clinic-based STI services during pregnancy.

**Methods** We conducted a randomised controlled trial of unaccompanied pregnant women attending a first visit at Kisumu County Hospital from September 2013 to June 2014. Women and their partners received either home-based couple education with HIV and syphilis testing during pregnancy or an invitation letter to clinic-based couple HIV testing. Men's self-reported health seeking outcomes during pregnancy were compared at 6 months postpartum.

**Results** Among 601 enrolled women, we reached 247 and 240 men in the intervention and control arms, respectively (85% participation). Men who received the intervention were more likely to seek an STI consultation based on symptoms or a