

*M. genitalium*, HSV-2, syphilis], bacterial vaginosis (BV) and candida were assessed in each women.

**Results** The prevalence of STIs or BV was 71% in Cape Town and 54% in Johannesburg, with 47% of Cape Town and 42% of Johannesburg women having BV. The CT prevalence in Cape Town [62/148 (42%)] was substantially higher than Johannesburg [26/149 (17%);  $p < 0.0001$ ]. CT was highest in 16–17 year old women and lowest in 20–22 year olds in both sites. Among the Cape Town CT isolates studied in detail ( $n = 40/62$ ), five distinct sequence types were seen. Despite these differences in STI/BV prevalence between cohorts, the women had largely similar behavioural risk profiles, including sexual orientation, age of sexual debut and lifetime number of sexual partners, though adolescents from Johannesburg were more likely to report previous known symptomatic STIs ( $p = 0.03$ ). BV was the most inflammatory condition, with upregulated concentrations of many of cytokines and growth factors observed in both sites. While CT was associated with more moderate cytokine up-regulation in Cape Town, high levels of inflammation were observed in CT positive women from Johannesburg.

**Conclusion** An alarmingly high STI and BV prevalence was found in these at risk populations, indicating a need for improved preventative strategies. In young women, BV caused a greater degree of inflammation than STIs and its effective management requires further investigation.

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#### 018.4 SEX DIFFERENCES IN HIV KNOWLEDGE, TESTING BEHAVIOURS, AND DECISION MAKING INFLUENCES IN RURAL MALAWI

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**Introduction** HIV remains the leading cause of death among Malawian adults. Nationally, 72% of women and 51% of men report having had an HIV test. In the Central Region, 9% of women and 6% of men are estimated to be HIV-infected. Making the decision to be tested and treated for HIV would be critical to implementation of the treatment-as-prevention approach to HIV control.

**Methods** Using a standardised instrument and electronic data capture, our research program, Umoyo wa Thanzi (UTHA, *Health for Life*), interviewed reproductive-age women ( $n = 1030$ ) and their male partners ( $n = 442$ ) living in rural Lilongwe District. We assessed relationships between decision-making factors and timing of the most recent HIV test.

**Results** Both HIV knowledge and HIV testing access were high, although women differed from men. The majority (73%) knew that people with HIV may appear well (women 70%, men 80%,  $p = 0.001$ ) and (88%) knew that condom use prevents HIV

transmission (women 86%, men 91%,  $p = 0.004$ ). Ninety per cent reported ever having tested for HIV, and recent testing was more common in women: 65% of women and 59% of men had been tested in the past year ( $p = 0.019$ ). Fewer women (74%) than men (89%) knew that their partner had tested ( $p < 0.001$ ), and fewer women (22%) than men (27%) reported concerns about testing confidentiality ( $p = 0.044$ ). Concerns about knowing HIV-status (overall 15%) or fearing partner's response (overall 14%) were uncommon. Decision-making factors—knowing about partner's testing, concerns about confidentiality or about knowing HIV-status, or fears of partner's response—were not associated with HIV test timing for women or men.

**Conclusion** Women had and men had differential HIV knowledge and decision-making influences in rural Malawi, though these did not predict differential testing behaviours. Planned work by our team includes comprehensive, community-based HIV testing; such testing will be accompanied by referrals for ART.

**Disclosure of interest statement** The authors have no conflicts of interest or financial disclosures to report.

#### 018.5 EXAMINING HPV PREVALENCE AND UPTAKE OF CERVICAL CANCER SCREENING AMONG HIV POSITIVE AND NEGATIVE WOMEN PARTICIPATING IN A PILOT RCT IN UGANDA COMPARING SELF-COLLECTION BASED HPV TESTING TO VIA

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**Introduction** With innovations in cervical cancer prevention, researchers must define best practices for cervical cancer screening in diverse populations and contexts. This pilot RCT compares the standard of care in most resource constrained settings, visual inspection with acetic acid (VIA), to self collected sampling for detection of high risk human papillomavirus (HR-HPV) DNA. We compared HPV prevalence and uptake of screening among women living with HIV (WHIV) and HIV negative (HIV-) women who participated in the trial.

**Methods** The pilot RCT was conducted between April and June 2014 when 500 women were recruited by community outreach workers in Kisenyi and completed a survey for demographic and risk factors including self-identified HIV status. Women were randomised to self-collected HR-HPV testing or VIA screening at the local health unit. Women who were HPV positive were referred for VIA. Women who tested positive at VIA were provided treatment with cryotherapy at the same visit or referred for colposcopy. Uptake rates of screening and HPV status in WHIV vs HIV- women were compared using Chi-square or Fisher's exact test.

**Results** Uptake of self-collected HR-HPV testing was 95.5% (21/22) in WHIV and 99.6% (226/227) in HIV- women ( $p = 0.17$ ). Among WHIV, 42.9% (9/21) were HPV positive compared to 28.3% (64/226) HIV- women ( $p = 0.25$ ). A greater proportion of WHIV were infected with HPV genotype 16 or 18 (28.6%, 6/21) than HIV- women (5.3%, 12/226) ( $p = 0.004$ ). All 9 WHIV who were HPV positive attended VIA follow up, compared to 24/64 HIV- women. In the VIA arm, 64.0% (16/25) WHIV attended screening compared to 46.7% (105/225) HIV- women ( $p = 0.23$ ).