

**Abstract**

**TUPE0413 - Baseline screening and risk factors for HIV and HSV-2 in an HSV-2 suppressive treatment trial in Tanzania**

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**Background:** The effect of HSV suppressive therapy on HIV incidence, and on HSV-2 and HIV genital viral shedding is being evaluated among high risk women in Tanzania. Baseline screening results for HIV and HSV-2 and risk factors for these infections are described.

**Methods:** Female bar, hotel and other facility workers in NW Tanzania are being enrolled into a double-blind, placebo-controlled trial of HSV-2 suppressive therapy with aciclovir 400mg bd. Following community information, mobilisation and mapping of food and recreational facilities, a baseline survey to screen for antibodies to HSV-2 and HIV in facility workers was conducted. Female facility workers aged 16-35 years were invited to attend a mobile clinic to screen for antibodies to HSV-2 and HIV. Exclusion criteria included self-reported pregnancy, breastfeeding and mobility. Odds ratios and 95% confidence intervals associated with HSV2 and HIV infection were estimated using multiple logistic regression.

**Results:** Initial mapping of bars, hotels and other facilities within 21 high transmission areas (truckstops and around goldmines) found 6212 women working in 2564 facilities. During three screening rounds a total of 2735 women attended. Of the first 2113 women analysed to date, 79% were HSV2 seropositive and 30% were HIV seropositive. HSV2 positive women were more likely to be HIV positive compared to HSV2 negative women (37% v.s. 9% respectively;  $p < 0.001$ ). There were similar independent risk factors for HIV and HSV2 infection, including older age, being widowed, being a bar worker and having had more lifetime partners. HSV2 infection was also associated with a lower level of education.

**Conclusions:** There is a high HSV and HIV prevalence in this population of female facility workers and HIV infection is strongly associated with prevalent HSV2 infection. These women are a suitable study population for a trial of HSV suppressive therapy for HIV acquisition and transmission.