Abstract:

Microbicides development programme, Tanzania. Are high-risk women who work in bars, guesthouses and similar facilities a suitable study population for clinical trials of vaginal microbicides in Africa?

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Methods: 1573 women aged 16-54y working in bars, restaurants, hotels, guesthouses or as local food-handlers were enrolled, interviewed and examined at community-based reproductive health clinics, provided specimens for HIV/STI and pregnancy testing, and asked to attend for follow-up every three months. HIV positive and negative women were eligible to enter the feasibility study and to receive free reproductive health services at any time.

Results: Baseline prevalence of HIV was 25.5%; pregnancy 9.7%; herpes simplex virus type-2 (HSV-2) infection 74.6%; active syphilis (TPPA+/RPR+) 10.2%, bacterial vaginosis 52.6%; gonorrhoea 5.5%; chlamydia 5.9% and trichomoniasis 12.3%. HIV prevalence at baseline increased with age, was lower among local food-handlers and women working in traditional bars, married women and those with fewer sexual partners, and was associated with HSV-2 infection and bacterial vaginosis. The incidence of HIV was 3.5 / 100PYs (95% CI 2.4, 5.2). Among 731 HIV sero-negative, non-pregnant women who attended a second visit, subsequent follow-up at 3, 6, 9 months was 83.9%, 79.5% and 72.4% respectively and 78.6% overall. Older women, those who had not moved home or changed their place of work in the last year, and women working in traditional bars or as local food handlers had the highest re-attendance. HSV-2 incidence was 18 / 100PYs (95% CI 11.2, 28.9); bacterial vaginosis 44.7 / 100PYs (95% CI 35.7, 55.9); active syphilis 3.4 / 100PYs (95% CI 1.8, 6.4). The incidence of pregnancy was 44.7 / 100PYs (35.7, 55.9).

Conclusions: These findings suggest that women working in food and recreational outlets are likely to be a suitable study population for microbicide and other HIV prevention trials in Tanzania.