

Abstract

OBJECTIVES:

Men who have sex with men (MSM) are at high risk of HIV-1 acquisition and transmission, yet there remains limited data in the African context, and for men who sell sex to men (MSM SW) in particular.

METHODS:

We enrolled 507 male sex workers in a Nairobi-based prospective cohort study during 2009-2012. All participants were offered HIV/STI screening, counselling and completed a baseline questionnaire.

RESULTS:

Baseline HIV prevalence was 40.0% (95% CI 35.8% to 44.3%). Prevalent HIV infection was associated with age, less postsecondary education, marijuana use, fewer female partners and lower rates of prior HIV testing. Most participants (73%) reported at least two of insertive anal, receptive anal and insertive vaginal sex in the past 3 months. Vaginal sex was reported by 37% of participants, and exclusive MSM status was associated with higher HIV rates. Condom use was infrequent, with approximately one-third reporting 100% condom use during anal sex. HIV incidence was 10.9 per 100 person-years (95% CI 7.4 to 15.6). Predictors of HIV risk included history of urethral discharge (aHR 0.29, 95% CI 0.08 to 0.98, $p=0.046$), condom use during receptive anal sex (aHR 0.05, 95% CI 0.01 to 0.41, $p=0.006$) and frequency of sex with male partners (aHR 1.33/sex act, 95% CI 1.01 to 1.75, $p=0.04$).

CONCLUSIONS:

HIV prevalence and incidence were extremely high in Nairobi MSM SW; a combination of interventions including increasing condom use, pre-exposure prophylaxis and access to effective treatment is urgently needed to decrease HIV transmission in this key population.