

Identifying at-risk populations in Kenya and South Africa: HIV incidence in cohorts of men who report sex with men, sex workers, and youth.

Abstract:

To identify and describe populations at risk for HIV in 3 clinical research centers in Kenya and South Africa. **DESIGN:** Prospective cohort study. **METHODS:** Volunteers reporting recent sexual activity, multiple partners, transactional sex, sex with an HIV-positive partner, or, if male, sex with men (MSM; in Kenya only) were enrolled. Sexually active minors were enrolled in South Africa only. Risk behavior, HIV testing, and clinical data were obtained at follow-up visits. **RESULTS:** From 2005 to 2008, 3023 volunteers were screened, 2113 enrolled, and 1834 contributed data on HIV incidence. MSM had the highest HIV incidence rate of 6.8 cases per 100 person-years [95% confidence interval (CI): 4.9 to 9.2] followed by women in Kilifi and Cape Town (2.7 cases per 100 person-years, 95% CI: 1.7 to 4.2). No seroconversions were observed in Nairobi women or men in Nairobi or Cape Town who were not MSM. In 327 MSM, predictors of HIV acquisition included report of genital ulcer (Hazard Ratio: 4.5, 95% CI: 1.7 to 11.6), not completing secondary school education (HR: 3.4, 95% CI: 1.6 to 7.2) and reporting receptive anal intercourse (HR: 8.2, 95% CI: 2.7 to 25.0). Paying for sex was inversely associated with HIV infection (HR: 0.2, 95% CI: 0.04 to 0.8). 279 (13.0%) volunteers did not return after the first visit; subsequent attrition rates ranged from 10.4 to 21.8 volunteers per 100 person-years across clinical research centers. **CONCLUSIONS:** Finding, enrolling, and retaining risk populations for HIV prevention trials is challenging in Africa. African MSM are not frequently engaged for research, have high HIV incidence, need urgent risk reduction counseling, and may represent a suitable population for future HIV prevention trials.