

ABSTRACT

The Mombasa Cohort is an open cohort study following HIV-seronegative women reporting transactional sex. Established in 1993, the cohort provides regular HIV counseling and testing at monthly visits. Over time, HIV acquisition risk has declined steadily in this cohort. To evaluate whether this decline may reflect changes in sexual risk behavior, we investigated trends in condom use and partner numbers among women who participated in the Mombasa Cohort between 1993 and 2007. Multinomial logistic regression and generalized estimating equations were used to evaluate the association of calendar time and follow-up time with key risk behaviors, after adjustment for potential confounding factors. At enrollment visits by 1,844 women, the adjusted probability of never using condoms decreased over time, from 34.2% to 18.9%. Over 23,911 follow-up visits, the adjusted probabilities of reporting >2 partners decreased from 9.9% to 4.9% and inconsistent condom use decreased from 7.9% to 5.3% after ≥ 12 cohort visits. Important predictors of risk behavior were work venue, charging low fees for sex, and substance abuse. Women with a later sexual debut had less risky behavior. Although sexual risk has declined among women participating in the Mombasa Cohort, HIV acquisition continues to occur and interventions to promote and reinforce safer sex are clearly needed.