

The objective of this study was to test the hypothesis that sexual risk behavior would increase following initiation of antiretroviral therapy (ART) in Kenyan female sex workers (FSWs).

DESIGN:

Prospective cohort study.

SETTING:

FSW cohort in Mombasa, Kenya, 1993-2008.

SUBJECTS:

Eight hundred and ninety-eight women contributed HIV-1-seropositive follow-up visits, of whom 129 initiated ART.

INTERVENTION:

Beginning in March 2004, ART was provided to women qualifying for treatment according to Kenyan National Guidelines. Participants received sexual risk reduction education and free condoms at every visit.

MAIN OUTCOME MEASURES:

Main outcome measures included unprotected intercourse, abstinence, 100% condom use, number of sexual partners, and frequency of sex. Outcomes were evaluated at monthly follow-up visits using a 1-week recall interval.

RESULTS:

Compared with non-ART-exposed follow-up, visits following ART initiation were not associated with an increase in unprotected sex [adjusted odds ratio (AOR) 0.86, 95% confidence interval (CI) 0.62-1.19, $P = 0.4$]. There was a nonsignificant decrease in abstinence (AOR 0.81, 95% CI 0.65-1.01, $P = 0.07$), which was offset by a substantial increase in 100% condom use (AOR 1.54, 95% CI 1.07-2.20, $P = 0.02$). Numbers of sex partners and frequency of sex were similar before versus after starting ART. A trend for decreased sexually transmitted infections following ART initiation provides additional support for the validity of the self-reported behavioral outcomes (AOR 0.67, 95% CI 0.44-1.02, $P = 0.06$).

CONCLUSION:

In the setting of ongoing risk reduction education and provision of free condoms, initiation of ART was not associated with increased sexual risk behavior in this cohort of Kenyan FSWs.