

**Objectives:** Although antiretroviral therapy (ART) prolongs life and reduces infectiousness, in some contexts, it has been associated with increased sexual risk taking. **Design:** Retrospective case-control study. **Setting:** Nairobi-based dedicated female sex worker (FSW) clinic. **Participants:** HIV-infected FSWs before and after ART initiation (n=62); HIV-infected and -uninfected control FSWs not starting ART during the same follow-up period (n=40). **Intervention:** Initiation of ART. **Primary outcome measures:** Self-reported condom use, client numbers and sexually transmitted infection incidence over the study period (before and after ART initiation in cases). **Results:** Sexual risk-taking behaviour with casual clients did not increase after ART initiation; condom use increased and sexually transmitted infection incidence decreased in both cases and controls, likely due to successful cohort-wide HIV prevention efforts. **Conclusions:** ART provision was not associated with increases in unsafe sex in this FSW population.