

ABSTRACT

We conducted a respondent driven sampling survey to estimate HIV prevalence and risk behavior among female sex workers (FSWs) in Nairobi, Kenya. Women aged 18 years and older who reported selling sex to a man at least once in the past 3 months were eligible to participate. Consenting FSWs completed a behavioral questionnaire and were tested for HIV and sexually transmitted infections (STIs). Adjusted population-based prevalence and 95 % confidence intervals (CI) were estimated using RDS analysis tool. Factors significantly associated with HIV infection were assessed using log-binomial regression analysis. A total of 596 eligible participants were included in the analysis. Overall HIV prevalence was 29.5 % (95 % CI 24.7–34.9). Median age was 30 years (IQR 25–38 years); median duration of sex work was 12 years (IQR 8–17 years). The most frequent client-seeking venues were bars (76.6 %) and roadsides (29.3 %). The median number of clients per week was seven (IQR 4–18 clients). HIV testing was high with 86.6 % reported ever been tested for HIV and, of these, 63.1 % testing within the past 12 months. Of all women, 59.7 % perceived themselves at ‘great risk’ for HIV infection. Of HIV-positive women, 51.0 % were aware of their infection. In multivariable analysis, increasing age, inconsistent condom use with paying clients, and use of a male condom as a method of contraception were independently associated with unrecognized HIV infection. Prevalence among STIs was low, ranging from 0.9 % for syphilis, 1.1 % for gonorrhoea, and 3.1 % for Chlamydia. The data suggest high prevalence of HIV among FSWs in Nairobi. Targeted and routine HIV and STI combination prevention strategies need to be scaled up or established to meet the needs of this population.