

Sexually transmitted diseases, male circumcision and risk of HIV infection among women in Nairobi, Kenya

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Abstract:

To study risk factors for HIV infection among women in Nairobi, Kenya, as the epidemic moves beyond high-risk groups. A cross-sectional case-control study among women attending two peri-urban family planning clinics. A total of 4404 women were enrolled after giving written informed consent. Information on risk factors was obtained by interview using a structured questionnaire. Blood was taken for HIV and syphilis testing, and genital specimens for gonorrhea and trichomoniasis screening. Two hundred and sixteen women (4.9%; 95% confidence interval, 4.3-5.5) were HIV-1-positive. Although risk of HIV was significantly increased among unmarried women and among women with multiple sex partners, most seropositive women were married and reported only a single sex partner in the last year. Women with a history or current evidence of sexually transmitted disease were at significantly increased risk; however, the prevalence of these exposures was low. Women whose husband or usual sex partner was uncircumcised had a threefold increase in risk of HIV, and this risk was present in almost all strata of potential confounding factors. Only 5.2% of women reported ever having used a condom. These data suggest that, among women who are not in high-risk groups, risk of HIV infection is largely determined by their male partner's behavior and circumcision status. Interventions designed to change male sexual behavior are urgently needed.