

Abstract

To evaluate the impact of human immunodeficiency virus (HIV) on human papillomavirus (HPV) and cervical intraepithelial neoplasia (CIN), a study was conducted of 147 HIV-seropositive and 51 HIV-seronegative prostitutes in Nairobi, Kenya. Among the women infected with HIV, 10 (7%) had signs or symptoms of significant HIV-related disease, and the remaining 93% were asymptomatic. The prevalence of cervical HPV DNA was 37% among HIV-seropositive women and 24% in HIV-seronegative women (odds ratio [OR] 1.7, 95% confidence intervals [CI] 0.8, 3.6, after adjusting for potential confounding factors). Genital warts, cervical HPV DNA, and cytologic findings consistent with CIN were all significantly associated with younger age and fewer years of prostitution, but were unrelated or weakly related to number of sexual partners per week or frequency of condom use. In a subset of 63 women with evaluable Papanicolaou smears, CIN was found in 50% of the women with HPV but only in 8% of those without HPV (adjusted OR 7.2, 95% CI 1.6, 32.1, $P = 0.006$). However, CIN was unrelated to HIV seropositivity (prevalence of 26% among HIV-seropositive women and 24% in HIV-seronegative women). Among women with cervical HPV DNA, HIV infection was not associated with an increased prevalence of CIN (47% prevalence among women with HIV versus 57% prevalence among women without HIV). Thus, in this population of HIV-seropositive women, most of whom had CDC Stage II or III infection, there was no demonstration of an adverse impact of HIV on CIN.