apillomavirus infections and HIV seropositivity as risk factors for abnormal cervical cytology among female sex workers in Nairobi.

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Abstract

We estimated type-specific prevalence of human papillomavirus (HPV) and examined risk factors for abnormal cervical cytology among 296 female sex workers from Nairobi, Kenya. Over half (54%) were infected with a high-risk (HR) HPV type, of which HPV16 and 52 were the most common types. HIV-1 prevalence was 23% and HIV-1 sero-positivity was associated with high-grade cervical lesions, particularly among women with CD4 count less than 500 cells/mm^3 (odds ratio [OR] = 6.9; 95% confidence interval [CI]: 1.7-24.9). Among women who had normal cytology at the time of entry into the study, the risk of having an abnormal Pap smear within one year was significantly elevated for women with multiple HPV types at study entry (adjusted odds ratio [aOR] = 6.0; 95% CI: 2.3-15.7) and with a subset of HR HPV types (aOR = 4.2; 95% CI: 1.6-11.2). Detection of multiple concurrent HPV infections may be a useful marker to identify women at risk of developing precancerous lesions in populations of high HPV prevalence.