

Vaginal washing and increased risk of HIV-1 acquisition among African women: a 10-year prospective study

Abstract:

BACKGROUND: No prospective study has examined the risk of HIV-1 acquisition associated with vaginal washing, although intravaginal practices have been identified as potentially important contributors to HIV-1 susceptibility. **OBJECTIVE:** To evaluate the contribution of vaginal washing to incident HIV-1 infection. **DESIGN:** Prospective cohort study. **METHODS:** Data were derived from a 10-year study of risk factors for HIV-1 acquisition among 1270 Kenyan female sex workers. Intravaginal practices were ascertained at study enrollment. At monthly follow-up visits, women completed a standardized interview and specimens were collected for diagnosis of HIV-1 and genital tract infections. **RESULTS:** Compared with women who did not perform vaginal washing, there was an increased risk for acquiring HIV-1 among women who used water [adjusted hazard ratio (HR), 2.64; 95% confidence interval (CI), 1.00-6.97] or soap (adjusted HR 3.84; 95% CI, 1.51-9.77) to clean inside the vagina, after adjustment for demographic factors, sexual behavior, and sexually transmitted infections. Furthermore, women who performed vaginal washing with soap or other substances were at higher risk for HIV-1 compared with those who used water alone (adjusted HR, 1.47; 95% CI, 1.02-2.13). **CONCLUSIONS:** In populations where vaginal washing is common, this practice may be an important factor promoting the spread of HIV-1. Intervention strategies aimed at modifying intravaginal practices should be evaluated as a possible female-controlled HIV-1 prevention strategy.