

ABSTRACT

Intravaginal practices (IVP) are common among African women and are associated with HIV acquisition. A behavioral intervention to reduce IVP is a potential new HIV risk-reduction strategy. Fifty-eight HIV-1-uninfected Kenyan women reporting IVP and 42 women who denied IVP were followed for 3 months. Women using IVP attended a skill-building, theory-based group intervention occurring weekly for 3 weeks to encourage IVP cessation. Vaginal swabs at each visit were used to detect yeast, to detect bacterial vaginosis, and to characterize the vaginal microbiota. Intravaginal insertion of soapy water (59%) and lemon juice (45%) was most common among 58 IVP women. The group-counseling intervention led to a decrease in IVP from 95% (54/58) at baseline to 0% (0/39) at month 3 ($p=0.001$). After 3 months of cessation, there was a reduction in yeast on vaginal wet preparation (22% to 7%, $p=0.011$). Women in the IVP group were more likely to have a *Lactobacillus iners*-dominated vaginal microbiota at baseline compared to controls [odds ratio (OR), 6.4, $p=0.006$] without significant change in the microbiota after IVP cessation. The group counseling intervention was effective in reducing IVP for 3 months. Reducing IVP may be important in itself, as well as to support effective use of vaginal microbicides, to prevent HIV acquisition.