eption, sexually

## transmitted diseases, and risk of heterosexual transmission of human immunodeficiency virus type 1.

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## **Abstract:**

To examine associations between method of contraception, sexually transmitted diseases (STDs), and incident human immunodeficiency virus type 1 (HIV-1) infection, a prospective observational cohort study was done among female sex workers attending a municipal STD clinic in Mombasa, Kenya. Demographic and behavioral factors significantly associated with HIV-1 infection included type of workplace, condom use, and parity. In multivariate models, vulvitis, genital ulcer disease, vaginal discharge, and Candida vaginitis were significantly associated with HIV-1 seroconversion. Women who used depo medroxyprogesterone acetate (DMPA) had an increased incidence of HIV-1 infection (hazard ratio [HR], 2.2; 95% confidence interval [CI], 1.4-3.4). In a multivariate model controlling for demographic and exposure variables and biologic covariates, the adjusted HR for HIV-1 infection among DMPA users was 2.0 (CI, 1.3-3.1). There was a trend for an association between use of high-dose oral contraceptive pills and HIV-1 acquisition (HR, 2.6; CI, 0.8-8.5)