

Infectious correlates of HIV-1 shedding in the female upper and lower genital tracts.

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Abstract:

OBJECTIVES: To simultaneously examine associations of bacterial vaginosis (BV) with potential risk factors in both the female and her male partner. **STUDY DESIGN:** We recruited women 18-45 years of age and their male partners from clinics in Nairobi, Kenya. All underwent face-to-face standardized interview physical examination, human immunodeficiency virus (HIV)-1 and syphilis serologic testing, endocervical cultures for *Neisseria gonorrhoeae*, and vaginal swabs for diagnosis of BV by Gram stain and trichomoniasis by culture. **RESULTS:** Of 219 women, 97 (44%) had BV. BV was significantly associated by univariate analyses with women's own risk factors (young age, being unmarried, early sexual debut, more than 1 sexual partner, lifetime, rectal sex, trichomoniasis, HIV infection, and by principal components analysis, with low socioeconomic status [SES]) and also with male partners' characteristics (HIV infection, and by principal components analysis, low SES, and poor hygiene). In multivariate analysis including risk factors from both genders, the odds of having BV was 5.7 times higher if either partner was HIV seropositive, 13.2 times higher if the female had trichomoniasis, 2.5 times higher if the female had more than 1 sex partner ever, and decreased with increasing age of the female. **CONCLUSION:** In this population, characteristics of males and of females were independently associated with BV. Close association of male hygiene and male HIV status precluded distinguishing the influence of male hygiene on partner's BV.