

Mutevedzi, P. C. (2008). Burden and determinants of bacterial vaginosis in hiv uninfected women aged 18 years and over, enrolled in the mdp301 clinical trial in the umkhanyakude district of northern kwazulu natal. Microbicides 2008. Delhi.

Background: Bacterial vaginosis (BV) results from a combination of factors including a shift from the predominant Lactobacillus species to a polymicrobial flora. The sequelae of BV include pelvic inflammatory discharge (PID), urinary tract infections, vaginal discomfort, endometritis, preterm labour, septicaemia. BV also predisposes women to acquisition of sexually transmitted infections (STI) including HIV. Sexual practice, douching and use of the intrauterine device are known to upset the normal balance of bacteria in the vagina and may be associated with BV, but other risk factors are not fully understood. This analysis seeks to assess determinants of BV in HIV negative women. Methodology: Baseline laboratory, sexual behaviour and demographic data from the first 600 women enrolled in the MDP301 trial was analysed in STATA. Vaginal slides were assessed for BV using the Ison and Hay BV scoring method (categorizing Grade III=positive; grade II= intermediate shift; grade 0, I and IV= negative BV). Logistic regression was used to determine baseline factors associated with BV. Results: Preliminary results show a BV prevalence of 52% (95% C.I: 48.5-56.7). In univariate analysis, BV was significantly associated with education OR=0.64 (95% CI: 0.46-0.89); infection with Trichomonas vaginalis (TV)  $\chi^2 = 15.8$ ;  $p < 0.01$  and condom use OR= 1.49 (95% C.I: 1.05- 2.1). Mean age of BV positive women (34.6) was higher than that of BV negative women (32.5) at  $p=0.01$ . In multivariate analysis (n= 540), controlling for age, contraceptive use and education, not using a condom (AOR 1.52; 95% CI: 1.04-2.21,  $p=0.02$ ) and having TV (AOR 0.34, 95% CI: 0.18-0.63,  $p < 0.01$ ) were positively and negatively associated with BV, respectively. Contraceptive use was not significantly associated with BV (AOR 0.74; 95% CI: 0.51-1.08,  $p=0.12$ ). Conclusion: There is a high burden of BV which is associated with not using condoms. Efforts to increase condom use might reduce the incidence of BV.