

## **Abstract**

**OBJECTIVE:** To assess validity of Pap smears in diagnosing bacterial vaginosis. **METHOD:** A prospective diagnostic accuracy study with 533 women in Mombasa, Kenya. Diagnosis of bacterial vaginosis using clinical observations scored with simplified Amsel's criteria and Bethesda system for Pap smears was compared with a reference standard (Nugent criteria for gram stains). Both laboratory tests were interpreted blindly. **RESULT:** Bacterial vaginosis prevalence was 36.7% (191/521) with Nugent criteria. Pap smear sensitivity and specificity were 59.4% (111/187) and 83.3% (270/324), with corresponding figures for simplified Amsel's criteria of 44.8% (81/181) and 84.8% (263/310). For Pap smear and simplified Amsel's criteria, positive predictive values were 67.3 and 63.3%, and negative predictive values 78.0% and 72.5%. **CONCLUSION:** In diagnosing bacterial vaginosis, Pap smears have moderate sensitivity (though higher than simplified Amsel's criteria). Specificity of Pap smears is adequate. Including bacterial vaginosis assessment as a standard component of Pap smears warrants consideration.