SUMMARY

**Background:** The World Health Organization estimated that there were 340 million new cases of curable sexually transmitted infections (STIs) in 1999. Of these, about 69 million cases were said to occur annually in sub-Saharan Africa with far reaching effects on economic, social and physical well being of the people. The greatest impact of this burden is seen in women and children. STIs have also been found to influence the transmission of the human immunodeficiency virus (HIV). Management of STIs in resource-poor settings is problematic. The WHO introduced the syndromic management to help in the control of STIs in these settings. However, these algorithms need to be adapted to local settings taking into consideration the prevalence of the various organisms causing STIs. This has given rise to a need to validate the algorithm.

**Objectives:** The study aimed to correlate the syndromic management treatment algorithm for vaginal discharge with the aetiological diagnosis based on laboratory investigations. Specifically, the sensitivity, specificity and positive predictive values of the syndromic management against a gold standard laboratory diagnosis were evaluated.
**Methods:** A total of 195 consecutive patients presenting to the study sites with vaginal discharge were enrolled in the study. Information on sociodemographic data was obtained with the aid of questionnaires. Samples were taken and examined for candida, trichomonas, bacterial vaginosis (BV), chlamydia and gonorrheal infections, after speculum and vaginal examinations.

**Results:** Mean age of subjects was 30.65(±7.4). Most of them were married (87.7%) and eighteen (9.2%) were in polygamous settings. Syndromic diagnosis of cervicitis in addition to vaginitis was made in nineteen women (9.7%) and vaginitis in 195(100%). Prevalence of candidiasis was 45.6% (89 patients), trichomoniasis 1.0% (2 patients), bacterial vaginosis 21.5% (42 patients) and chlamydia 13.0% (25 patients). Yellow colour of discharge, symptoms in partners and presence of cervical mucopus on speculum examination were statistically significant in making a diagnosis of cervicitis. The sensitivity, and positive predictive values (PPV) of the syndromic management in detecting vaginal infections (87.5% being 98 patients correctly identified by the algorithm and 50.3% being 98 patients correctly treated) performed better than corresponding values for cervicitis (20% being 5 patients correctly identified and 26.3% being 5 patients correctly treated). The algorithm for cervicitis improved on addition of
speculum examination (36% and 32.1% for sensitivity and PPV respectively).

**Conclusion:** The study shows that the syndromic diagnosis for vaginal discharge fares better for vaginitis, especially with addition of speculum examination. The application of syndromic diagnosis for cervicitis resulted in omission of patients who had evidence of cervical infections by bacteriologic examination. Improvement in the diagnostic accuracy for cervical infection may be achieved by addition of simple, rapid diagnostic tests that can be used as an adjunct to the syndromic treatment algorithm.