Establishing The Accuracy of Self Reported STI Symptoms Compared With Vaginal Speculum Examination Findings Among HIV Infected Women Receiving Care In Kisumu, Kenya

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Background: Among persons living with HIV (PLWHAs), sexually transmitted infections (STIs) can enhance the transmissibility of HIV. Syndromic algorithms are inexpensive and widely applied but they have some shortcomings.

Objectives: The aim of this study was to document the pattern of common STIs among women screened for cervical cancer screening in a HIV clinic, and to determine the concordance rate between self-reported vaginal symptoms compared to clinician findings during examination **Methods:** This retrospective review undertaken between November 2010 and January 2012 at the Lumumba Comprehensive Care clinic (Kisumu, Kenya) included all visit records and compared patient symptoms to findings during vaginal speculum examinations. Clinically diagnosed STIs were documented and appropriate syndromic treatment provided. Proportional and sensitivity analysis estimates of self-reported symptoms compared to vaginal speculum findings were performed using STATA v.12.

Results: A total of 1510 women were evaluated. The median age was 33(IQR 28,40) years; 409(27.5%) had CD4 less than 350, 1101(73.2%) were on HAART, 560(37.1%) were using contraception, 208(13.8%) reported previous STIs and 20(1.3%) had multiple current sexual partners. The mean age of sexual debut was 17.2(SD 2.7) years. The majority of the women were asymptomatic [1246 (82.5%)] by self-report. Symptomatic patients 264(17.5%) complained of pruritus 162(44.6%), genital discharge 114(31.4), odor 36(9.9%), lower abdominal pain 30(8.3%), vaginal bleeding 9(2.5%), vulval pain 3(0.8%), genital ulcers 6(1.7%), vaginal swelling 1(0.3%), frequent urination 1(0.3%) and warts 1(0.3%). Among those who had no complaint, 4.8% (n=60) were found to have an STI on examination; 53(88.0%) had vaginal discharge, 5(8.3%) warts and 2(3.3%) genital ulcers. Overall, the discordance rate between patient self-report and provider examination findings was high [214(93.0%)]. The sensitivity for the self-reported STIs was 21.1% while specificity was 82.7%. The positive and negative predictive values for the self-reported symptoms were 6.1% and 95.2% respectively.

Conclusion: Among women living with HIV in this setting, the low sensitivity may lead to under-diagnosis and under-treatment leading to a higher rate of STI associated morbidity and complications as well as increased transmission of HIV.