Background Tuberculosis (TB) is the leading opportunistic infection and cause of death among people living with HIV (PLHIV). HIV predisposes latently TB-infected people to developing TB disease. Current TB screening algorithms lack sensitivity and specificity. We sought to determine the sensitivity and specificity of conducting a two-step clinical screening and testing for latent TB infection (LTBI).

Methods We enrolled 650 newly diagnosed HIV patients aged >7 years from HIV clinics in Kisumu County, Kenya. Study participants were screened for TB symptoms and sputum tested for smear microscopy, liquid culture and GeneXpert MTB/RIF (Xpert). Quantiferon (QFT) and tuberculin skin testing (TST) for LTBI. Positive results from liquid culture or Xpert defined a TB case. 'Negative for TB' was any participant with at least two negative Xpert or culture results from different specimens. Sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were calculated and compared for one – and two – stage screening and stratified by QFT results.

Results Females were 62% of participants. TST-positive were 88 of 592 (15%); 274 of 648 (42%) were QFT-positive. TB prevalence was 15%. Screening results for one stage and second stage: 75% and 97% sensitivity, 31% and 12%, specificity, 89% and 96% NPV and 14% and 15% PPV, respectively. Screening performance stratified by QFT for sensitivity, specificity, NPV and PPV was 96%, 11%, 91% and 24% among QFT-positive.

Conclusions Two-step versus one-step screening increases sensitivity but reduces specificity. Positive QFT result increases the PPV of two-step screening.

PA-082 IMPROVING TUBERCULOSIS SCREENING AND DIAGNOSIS AMONG PEOPLE WITH HIV: UPDATES FROM THE INTENSIFIED CASE FINDING STUDY IN KISUMU COUNTY, KENYA

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