Reliability of self-reported HIV status among African MSM screened for HPTN 075


ABSTRACT

In many research studies, individuals who test positive for HIV infection are asked if they had a prior HIV diagnosis. One approach for assessing the accuracy of self-reported data on HIV status is to identify participants who are on antiretroviral treatment (ART) by testing samples for the presence of antiretroviral (ARV) drugs.

We evaluated the accuracy of self-reported HIV status among men who have sex with men (MSM) and transgender women who have sex with men who were screened for participation in the HIV Prevention Trials Network (HPTN) 075 study. HPTN 075 evaluated the feasibility of recruiting and retaining MSM in sub-Saharan Africa for HIV prevention trials.

METHODS

STUDY COHORT

HPTN 075 screened participants at four study sites (Kisumu, Kenya; Blantyre, Malawi; Cape Town, South Africa, and Soweto, South Africa). This sub-study included participants who met the following criteria: Age 18 to 44 years; Assigned male at birth; Reported ever having had sex with a man; Agreed to HIV testing; Concordant HIV positive test results at screening; Not in HIV care or taking ART.

LABORATORY TESTING

HIV testing was performed at study sites. Additional HIV testing, viral load testing, and ARV drug testing was performed retrospectively at the HPTN Laboratory Center. ARV drug testing was performed with an assay that detects 20 ARV drugs in 5 drug classes (limit of detection: 2 or 20 ng/ml, depending on the drug).

STATISTICAL ANALYSIS

Participants were classified as previously diagnosed if they reported being infected or had ARV drugs detected that indicated that they were on ART (Figure 1). Logistic regression was used to compare characteristics of previously-diagnosed participants who did or did not report a prior HIV diagnosis.

RESULTS

Figure 1. Classification of participants as previously diagnosed.

- Participants who reported having sex with men were more likely to report a prior positive HIV status.
- Participants who did not report knowing their last HIV test result were more likely to report a prior positive HIV status.
- Participants who reported having sex with men who were screened for participation in the HPTN 075 study were more likely to report a prior positive HIV status.

CONCLUSIONS

- Self-report plus ARV drug testing provided a more accurate estimate of the frequency of previously diagnosed infections than self-report alone.
- The proportion of previously-diagnosed participants who reported a prior positive HIV test varied by study site.
- Participants who reported having sex with men were more likely to report a prior positive HIV test.

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