

The impact of home-based HIV testing services on progress towards the UNAIDS 90-90-90 targets in a hyperendemic area of South Africa

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Abstract

In several sub-groups of South Africa, the percentage of HIV-positive individuals aware of their status falls well below the UNAIDS 90% target. This study examined the impact that home-based HIV testing services (HBHTS) had on knowledge of status in a hyperendemic area of South Africa.

Methods: We analysed data from the second cross-sectional HIV Incidence Provincial Surveillance System survey (2015/2016), a representative sample (n=10236) of individuals aged 15-49 years.

Participants completed a questionnaire, provided blood samples for laboratory testing (used to estimate HIV prevalence) and were offered HBHTS. The proportion of people living with HIV (n=3870) made aware of their status through HBHTS was measured and factors associated with HBHTS uptake were identified. **Results:** Knowledge of HIV-positive status at the time of the survey was 62.9% among men and 73.4% among women. Through HBHTS, the percentage of HIV-positive men and women who knew their status rose to 74.2% and 80.5% respectively. The largest impact was observed among youth (15-24 years).

Knowledge of status increased from 36.6% to 59.3% and from 50.8% to 64.8% among young men and women respectively. Additionally, 51.4% of those who had previously never tested received their first test. Key reasons for declining HBHTS among undiagnosed HIV-positive individuals included fear and self-report of a HIV-negative status. **Conclusions:** HBHTS was effective in increasing awareness of HIV-positive status, particularly among youth, men and those who had never tested. HBHTS could have a marked impact on progress towards the UNAIDS 90-90-90 targets within these sub-groups.