

LINKAGE TO CARE AND PREVENTION AFTER HIV SELF-TESTING: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background:

Effective linkage to prevention and care is a crucial step following HIV testing services. This systematic review aimed to determine the proportion of individuals who are linked to prevention and care after HIV self-testing (HIVST) and describe factors associated with linkage.

Methods:

A literature search was conducted across eight databases, including conference abstracts, up to October 2023. Linkage to care after HIVST was defined as getting a confirmatory test or antiretroviral therapy (ART) if the self-test was reactive, and/or pre-exposure prophylaxis (PrEP) if the self-test was non-reactive. A random-effects meta-analysis was performed to summarise the linkage to prevention and care.

Results:

A total of 10,071 studies were screened, of which, 174 were included in this meta-analysis. Most studies were conducted in the African region among key populations using oral fluid-based HIVST kits. Overall, 92% (95%confidence interval(CI):89–96) of those whose HIVST was reactive were linked to confirmatory testing, and 89% (95%CI:84–93) of those newly-diagnosed with HIV initiated ART. Eighty-four percent (95%CI:74–93) of self-testers were linked to care. Of the individuals whose HIVST was non-reactive, 9% (95%CI:2–19) were linked to PrEP. Studies utilising assisted HIVST demonstrated a higher linkage to confirmatory testing 98% (95%CI:88–100) and ART initiation (91% (95%CI:84–96)) compared to studies using unassisted self-testing (91% (95%CI:86–95), 89% (95%CI:83–95), respectively). Our meta-regression analysis found that the type of delivery model for the HIVST kits influenced linkage and that individuals who obtained their HIVST kits through a social network–based approach (SNA) were more likely to be linked to confirmatory testing (adjusted odds ratio (aOR)=1.28 (95%CI:1.10–1.50), $p=0.001$) compared to non-SNA service delivery model.

Conclusion:

In the context of expanding HIVST services globally, we found that linkage to confirmatory testing and ART initiation after HIVST is generally high, particularly with assisted HIVST and when SNA was used to obtain the HIVST kits.

Disclosure of Interest Statement:

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