

Support systems for HIV self-testing: A scoping review

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Background: HIV self-testing (HIVST) can improve uptake of testing, particularly amongst key populations. By synthesising the extant literature around systems supporting the self-testing process, we aimed to 1) develop a typology for HIVST support systems used worldwide; and 2) describe the effectiveness of support systems in terms of usability, acceptability and proportion linked to care.

Methods: We conducted a scoping review following the PRISMA Extension for Scoping Reviews. We searched five databases between January 2000 and March 2022. We included articles that described systems supporting adults (aged ≥18 years) to perform HIVST, interpret their result and/or link to care. We used thematic analysis to inductively identify themes related to types of HIVST support systems.

Results: From 14,385 studies screened, we included 389 for analysis, including 129 (33%) randomised controlled trials. Many studies included key and other priority populations such as men who have sex with men (n=125, 32%), female sex workers (n=38, 10%) and pregnant people (n=20, 5%). Most were conducted in Africa (n=216, 56%). Ninety-four percent (n=366) of studies described a system for self-test use and interpretation, most commonly: written instructions (n=191, 52%), in-person demonstrations (n=123, 34%) and video demonstrations (n=102, 28%). Ease of testing was high with written instructions alone; however, studies identified barriers for individuals with lower health literacy or education levels. Seventy-eight percent (n=302) of studies described a post-test support system, most commonly: linkage-to-care counselling (in-person or online; n=143, 47%) and written instructions (n=84, 28%). As reported by 37% (n=145) of studies, linkage to confirmatory testing (median 76%, IQR 52-100%) and follow-up care (median 81%, IQR 56-100%) was moderately high.

Conclusion: Many systems to support HIVST users during and after testing have been implemented. Optimisation of systems tailored toward individual and local contexts should be prioritised to ensure equitable access to timely treatment and prevention services.

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