



PDRI Policy Brief 2: The effect of providing women sustained access to HIV self-tests

November 30, 2021

Key takeaways:

- Providing women with sustained access to HIV self-tests had no significant effect on HIV incidence.
- Providing HIV self-tests did, however, increase rates of testing among primary partners and women's awareness of those partners' HIV status.
- Sustained access to self-tests for women at high risk of HIV infection also resulted in higher numbers of HIV-positive male partners who were identified.

Background:

The major expansion in access to HIV services in eastern and southern Africa over the past decade has led to considerable progress in combating the region's HIV epidemic, with reductions in new HIV infections and AIDS-related deaths. However, lower awareness of HIV status among men results in worse health outcomes for them and missed opportunities for preventing HIV transmission. The UNAIDS' goal of 95% of people living with HIV being aware of their status by 2025 reflects the importance of HIV status awareness as the entry point to treatment services and prevention of further transmission. Identifying new prevention options for women at high risk of HIV infection is an important priority as well.

While various community-based testing strategies have been successful in increasing HIV status awareness, there remains a need for targeted testing approaches that can reach individuals at high risk of HIV infection. In this regard, HIV self-testing has been a promising new approach that has high acceptability among diverse populations. With self-testing, individuals collect their own sample and perform a simple, rapid HIV antibody test in the absence of a provider. Many countries in sub-Saharan Africa have

expanded access to self-tests and an important priority now is to identify optimal self-test distribution strategies that reach individuals who do not test regularly.



Figure 1: HIV self-test

Previous studies have shown that provision of multiple self-tests to women so they can voluntarily initiate male partner testing and couples testing is a safe, feasible approach that results in considerably higher male partner testing than conventional strategies such as invitations for clinic-based testing. However, few studies have assessed the merits of this approach among female sex workers and women who report multiple partners. Studies have also not examined whether sustained access to self-tests for women at high risk of HIV infection conveys prevention benefits to them.

Research design:

The study took place in Kenya's Siaya County, a region with high HIV prevalence. Sixty-six clusters of communities where transactional sex is common were selected for study. Within each community, the study enrolled HIV-negative women who were aged 18 years or above and who self-reported having two or more male sexual partners in the past month. In total, 2,090 women were enrolled in the study. Within each of 33 cluster pairs, clusters were randomly assigned to an intervention group in which participants received sustained access to HIV self-tests for secondary distribution or to a comparison group in which participants received basic encouragement to seek clinic-based HIV testing services.

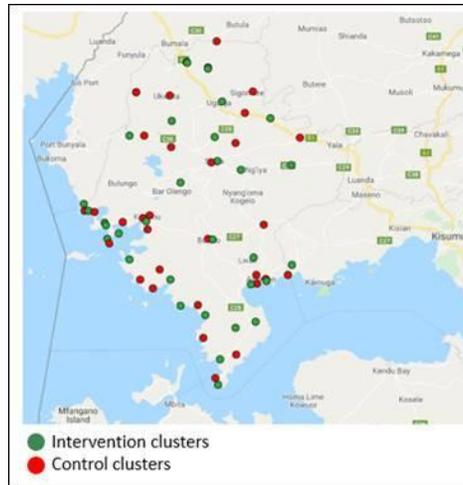


Figure 2: Location of intervention and control clusters

Study participants were followed for 18-24 months, depending on the date on which they were enrolled. Every 3 months, participants were asked about their experiences with using self-tests or the services indicated on referral cards that were distributed at the beginning of the study. Participants in the intervention group could also request more self-tests while participants in the comparison group could request more referral cards at any time throughout the study. To measure HIV incidence, all participants were tested for HIV every 6 months. Questionnaires regarding testing and sexual behaviors of participants and their partners were also conducted every 6 months.

Outcomes analyzed in the study included HIV incidence, self-reported testing of the participants and their sexual partners, and intimate partner violence.

Results:

The study enrolled 2,090 women in 66 study clusters (1,033 women from 33 intervention group clusters and 1,057 women from 33 comparison group clusters). Retention at 18 months was 90.1% (N=949) within the intervention group and 87.2% (N=891) in the comparison group.

Baseline characteristics of participants in the two study groups were similar. Participants' median age was 25 years and 65% were married. The median number of sexual partners in the past month was two and sex work was an income source for 66% of participants. Participants in the intervention group reported receiving an average of 16.8 self-tests during the study, whereas participants in the comparison group reported receiving an average of 16.3 HIV testing services referral cards.

The availability of self-tests had no significant effect on rates of HIV incidence. While 19 participants in the intervention group acquired HIV compared to 15 in the comparison group, the risk of HIV infection was not significantly different between the intervention

groups and comparison groups (1.18 per 100 person-years in the intervention group and 0.98 per 100 person-years in the comparison group, $p=0.64$).

However, the study found that providing self-tests to women did make it more likely that participants' primary partners tested for HIV. Nearly 90% of women in the intervention group reported their primary partner tested for HIV in the past 6 months. Couples testing every 6 months and identification of male partners who were HIV positive was also substantially higher because of the self-testing intervention. These findings underscore the potential for self-tests, when combined with novel distribution strategies, to increase HIV testing coverage.

Over the course of the study, the intervention resulted in nearly twice as many male partners who were identified as having HIV. This is an important result since increasing awareness of HIV status among people living with HIV is a central part of efforts to increase HIV treatment coverage and reduce onward transmission. Finally, the study also found no significant difference in reported intimate partner violence between the intervention and comparison groups.

Policy Implications:

The study highlights that secondary distribution of HIV self-tests by women at high risk of HIV infection is an effective strategy not only for increasing HIV testing rates among men, but also for facilitating couples testing.

Especially among women who engage in transactional sex and are at higher risk of acquiring HIV, making self-tests more easily available may facilitate secondary distribution of self-tests within existing social and sexual networks. Even though access to self-tests did not reduce the risk of acquiring HIV, the intervention did convey important benefits to women and their partners. In particular, the study demonstrated that access to self-tests combined with innovative distribution strategies can dramatically increase awareness of HIV status among men as well as women's awareness of their male partners' HIV status.

Sustained access to self-tests and secondary distribution to sexual partners, when coupled with available HIV prevention and care services, is thus a potentially powerful tool that can help support HIV elimination goals.

[Read full study](#)

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Article citation

Thirumurthy, H., Bair, E.F., Ochwal, P., Marcus, N., Putt, M., Maman, S., Napierala, S., Agot, K. 2021. The effect of providing women sustained access to HIV self-tests on male partner testing, couples testing, and HIV incidence in Kenya: a cluster-randomised trial. *The Lancet HIV*, 8, e736–e746.