

Secondary HIV self-test distribution increases male partner testing



There is established evidence that men are less likely than women to engage with HIV services; the latest global estimates show that, compared with women, 1 million more men living with HIV do not know their status, 1.8 million know their status but are not on treatment, and 1.6 million are not virally suppressed.¹ Elimination of HIV requires concerted efforts to ensure that men are not left behind. Male partners of pregnant women are particularly important to engage to optimise HIV outcomes for themselves, their pregnant or lactating partners, and their babies, because incident maternal infection during breastfeeding is the largest contributor to postpartum mother-to-child transmission of HIV.^{2,3}

In this issue of *The Lancet Global Health*, Wilbroad Mutale and colleagues report on parallel two-group trials in women who were HIV positive (trial 1) and women who were HIV negative (trial 2), all of whom were enrolled for antenatal care at a health facility in Zambia.⁴ In each trial, both groups received partner notification services according to local guidelines for HIV positive individuals, with adaptation for the women who were HIV negative. Women randomly assigned to the intervention were additionally offered up to five HIV self-tests for distribution to their partners. The primary outcome was male partner testing at a health facility within 30 days of randomisation, which was deemed to be important for linking men to HIV prevention and care, and this was measured indirectly through self-reports by enrolled women. The primary outcome might have limited applicability in the era of differentiated services, in which the uptake of testing and linkage to post-test services sometimes occurs outside of health facilities. A more applicable predefined endpoint, which included the use of self-tests, was reported male partner testing of any kind within 30 days of randomisation.

Trial 1 recruited 116 participants and trial 2 recruited 210 participants. The combined intervention was associated with lower uptake of male partner testing at a health facility. Of the women who were HIV positive in the intervention group (trial 1), 3 (6%) of 47 reported facility-based male partner testing versus 15 (28%) of 53 in the control group (probability difference

-21.9% [95% CI -35.9 to -7.9%]). The respective results from trial 2 were 3 (3%) of 102 versus 33 (34%) of 98 (probability difference -30.7% [95% CI -40.6 to -20.8]). However, and perhaps more importantly, reported male partner testing of any kind increased, with 36 (77%) of 47 versus 19 (36%) of 53 (probability difference 40.7% [95% CI 23.0 to 58.4%]) in trial 1, and 80 (78%) of 102 versus 54 (55%) of 98 (probability difference 23.3% [95% CI 10.7 to 36.0%]) in trial 2; probably reflecting self-testing in male partners. These findings add to the evidence of the effectiveness of secondary distribution of HIV self-tests in increasing uptake of testing of male partners of pregnant women.⁵

It is unsurprising that the combined intervention of partner notification and HIV self-test distribution resulted in decreased facility-based testing. HIV self-testing is a convenient approach that allows users to test when and where they please. Men often avoid health facilities,⁶ hence a non-facility-based testing approach would probably be more acceptable. Mutale and colleagues worry that the decrease in facility-based testing could be a sign of suboptimal linkage to post-test services. However, a 30-day window might be too short to estimate linkage:⁷ there is evidence that community-based HIV self-testing is associated with improved uptake of HIV treatment in nearby health facilities.⁸ A 2021 systematic review found that HIV self-testing is associated with a larger number of people who test and are linked to care than standard provider-delivered testing.⁹

Linkage to prevention in those self-testing negative and at high HIV risk is a different and key consideration, particularly given the high rates of serodiscordancy that were reported by Mutale and colleagues. There is a dearth of trial evidence on linkage to prevention following HIV self-testing.⁹ Given our understanding of male aversion to visiting health facilities, the provision of differentiated or decentralised services such as community-based or work place models, which have successfully increased uptake of prevention services in men,¹⁰ could be an option for people using self-tests away from health facilities. However, it is important to determine whether these decentralised services would

be cost-effective, given that they can be highly resource-intensive.¹¹

In summary, Mutale and colleagues found that a combination approach that included secondary distribution of HIV self-tests to partners of pregnant women was associated with decreased uptake of facility-based HIV testing and increased uptake of testing of any kind. Given the growing evidence of the effectiveness of secondary distribution of HIV self-tests, programmes need to consider including them into the mixed bag of combination approaches that can have positive effects. Self-testing has been shown to be a particularly acceptable and useful approach during the COVID-19 pandemic, reducing health facility congestion and risk of COVID-19 in health care staff. Importantly, programmes need to pay attention to the potential for decreased linkage to post-test services, particularly prevention services, and explore ways of providing access to prevention and care in models that are acceptable to men. The requirement for men and other hard-to-reach populations to continue accessing services at health facilities remains a bottleneck within HIV prevention and treatment cascades.

We have no competing interests to declare

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