Evidence shows that people on effective antiretroviral therapy (ART) with an undetectable viral load are less likely to transmit HIV to others.\(^1\) This has led to the UNAIDS’ call to end Aids by 2030.\(^2\) If we are to achieve this goal it will require that all people living with HIV test and start treatment early. However, previous research in Africa Health Research Institute’s (AHRI) setting of uMkhanyakude, rural KwaZulu-Natal, has highlighted men’s reluctance to get tested and start treatment.\(^3,4\) This is a great concern as the men who are not benefiting from ART are infecting young women, which contributes to the continued high numbers of new HIV infections among young women and HIV related deaths among men.

To realise the UNAIDS’ goal of ending Aids by 2030, there is a need for new strategies to increase the uptake of HIV testing and linkage to care among men. AHRI conducted a cluster randomised controlled trial called ‘Home-based intervention to test and start’ (HITS) to determine if providing financial incentives and an HIV-specific support decision app could increase uptake of HIV testing and HIV treatment among men, and ultimately lower the number of new HIV infections among young women in rural South Africa. Our results show that a small financial incentive dramatically increased the uptake of home-based HIV testing among men.
RESEARCH METHODS AND TRIAL DESIGN

The trial was conducted in the uMkhanyakude District of Northern KwaZulu-Natal. Here, AHRI fieldworkers visit households annually to complete a health and demographic survey and collect blood for anonymised HIV testing (HIV surveillance), and offer rapid HIV testing to consenting individuals. Using this platform, the study team assigned the 45 communities in AHRI’s research area into four groups (arms) to receive two interventions (Figure 1) aimed at increasing participants’ motivation to test for HIV and link to care where necessary:

1. Financial micro-incentive in the form of a R50 voucher from Pick n Pay (local supermarket in the area).
2. Male-targeted HIV-specific decision support implemented via a tablet-based app called ‘Empowering people through informed choices for HIV’ (EPIC-HIV). The app uses a mixture of audio, video, text, graphics and still photos to tell positive stories of men living with HIV to increase internal motivation and empower men to make an informed decision about knowing their HIV status early, and starting ART early.

The interventions were offered in a two-stage approach: the first stage aimed at increasing uptake of HIV testing, and the second stage aimed at increasing linkage to care. A total of 4,419 people participated in the trial between February and December 2018.

Figure 1: The two interventions used in the study

**FINANCIAL MICRO-INCENTIVES (R50 FOOD VOUCHER)**

Aimed at providing an external reward (incentive) to nudge participants to know their HIV status and start ART where necessary.

- Participants receive a R50 voucher conditional to taking a rapid HIV test at home.
- Receive a second R50 voucher when they present at local clinic for HIV care.

**MALE TARGETED HIV DECISION SUPPORT (EPIC-HIV)**

Tablet-based app that is aimed at increasing internal motivation to test early (EPIC-HIV 1) and link to care where necessary (EPIC-HIV 2) by using positive stories from other men living with HIV.

- EPIC-HIV 1 offered to participants at home prior to HIV test offer.
- EPIC-HIV 2 is offered if participant tests positive and does not link to care within a month.

Uses a mixture of audio, text, video, still photos and graphics to introduce the benefits of knowing HIV status early and starting treatment and remaining on it.
KEY FINDINGS

01 A small financial incentive increased uptake of rapid HIV testing at home by more than 50% among men when offered either alone or in combination with the male-targeted HIV-specific decision support app.

02 A small financial incentive also increased uptake of HIV testing among women by 45%.

03 The financial incentive arm was about five times more likely to diagnose people living with HIV among men who reported having never tested HIV-positive previously, compared to the standard of care arm.

04 By contrast, the EPIC-HIV app, which was designed to serve as an internal motivator to test for HIV, did not increase uptake of rapid HIV testing at home.

RECOMMENDATIONS

01 The Department of Health (DOH) could consider using financial micro-incentives to increase uptake of HIV testing in populations or areas with low HIV testing coverage.

02 The financial incentives could be combined with other interventions that aim to increase internal motivation to link to care.

03 Partners of the DOH could consider including this in their package of support to the DOH.

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References