

Reaching High-Risk Women for PrEP: Learning from ARV-based HIV Prevention Trials

¹Theresa Hoke, ¹Kayla Stankevitz, ¹Katie Schwartz, ¹Yixuan Li, ²Imelda Mahaka, ³Saiqa Mullick ¹ FHI 360, Durham, NC, USA; ² Pangaea Zimbabwe Aids Trust (PZAT), Harare, Zimbabwe;

³ Wits Reproductive Health and HIV Institute, Johannesburg, South Africa

BACKGROUND

Women face a disproportionate burden of HIV: young women 15–24 years old in sub-Saharan Africa are twice as likely as young men to be living with HIV (1). Despite much recognition of the importance of understanding how to identify and reach women who are most at risk of acquiring HIV (2-4), there is little documented guidance on how to carry this out. Devising strategies to link at-risk women to PrEP services most effectively and efficiently is important for PrEP introduction (5).

Important lessons can be learned from the success (and failures) of clinical trials in identifying and recruiting at-risk women for HIV prevention trials. Having documented HIV incidence > 3% in the placebo arm, many clinical trials have clearly been successful in identifying and recruiting at-risk women.

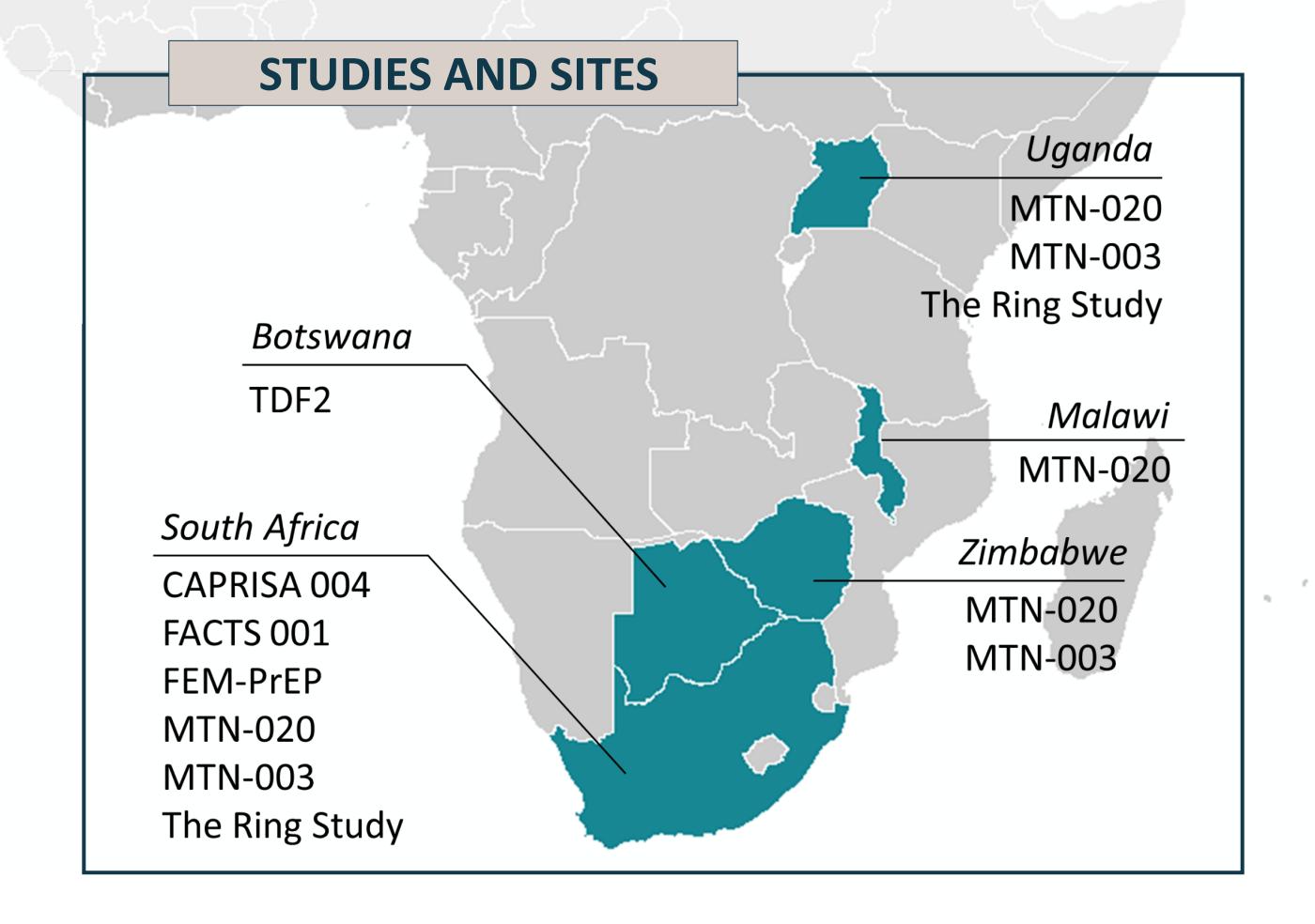
To learn from clinical trial experience about how high-risk populations can be reached with PrEP rollout, this study explored methods of recruitment that have been used in HIV prevention trials. Acknowledging that there are important differences between research settings and normal service delivery contexts, researchers sought to identify recruitment strategies that could be feasibly implemented in real-world settings.

METHODS

We conducted a descriptive, mixed methods study examining recruitment methods used in trials (phase IIb, III) testing the effectiveness of ARV-based HIV prevention products (collectively referred to as PrEP). Eligible trials were those conducted in Africa, included HIVnegative females, started recruitment between January 2007 and January 2017, and had a placebo arm HIV incidence of 3% or higher.

We conducted a desk review to compile information about each study, then conducted key informant interviews with study leadership or staff responsible for recruitment and eligibility screening. Questions were guided by the socio-ecological behavioral framework to explore multi-level factors potentially leveraged by recruiters to encourage PrEP trial participation. Data were structurally coded in NVivo, and an applied thematic analysis was conducted.

Interviews were conducted with 31 staff from seven HIV prevention studies, across five countries. The map below presents included studies and the country sites represented. HIV prevention products studied included: 1% tenofovir gel, TDF/FTC (Truvada), and the dapivirine ring. Incidence rate in the control arms of the studies ranged from 3.1 - 9.1 per 100 person years.



LIMITATIONS

- Eligible participants from Kenya and Tanzania were not included because they were not available for interviews in the data collection period.
- Research staff and clinical trial volunteer participants may differ in many ways from people in real-world health settings.

COMMUNITY-BASED RECRUITMENT APPROACHES

Informants from all trials emphasized community outreach -beyond standard Community Advisory Board (CAB) engagement- as a primary strategy for recruiting trial participants. This section presents key elements of community-based approaches that could be applied in public health practice supporting PrEP rollout.

Engaging gatekeepers who have influence in the community

Key informants discussed the importance of engaging local gatekeepers – people like chiefs, ward counselors, traditional healers, and leaders serving on community advisory boards. Gatekeepers can provide an ear to the community, helping researchers understand if there is misinformation or stigma surrounding PrEP. Further, their deep understanding of the community can help identify high-risk areas or populations to target.

> "People listen to traditional healers more than anybody." So we want them to say this is a good thing to do."

Community mapping

Many participants mentioned community mapping as a successful method of recruiting highrisk participants. Community mapping included talking to gatekeepers and other community members to understand areas where high-risk people gather and which influential people to include as partners. Some researchers also used data to understand high-prevalence areas.

"In terms of statistics, we did mapping [...] what we did is we said, 'Where are our seroconverters coming from? Which local districts?' [...] And to date, those places still remain high risk."

Door-to-door

In high-prevalence areas, one successful method was door-to-door recruitment. Benefits of door-to-door included:

- **Privacy:** Young women were often not comfortable talking in groups or with friends. Door-to-door allowed them to have one-on-one discussions in a private area.
- Reach: Door-to-door allowed outreach workers to find women who wouldn't otherwise visit a clinic.
- Efficiency: Since NGOs or CHWs already had door-to-door campaigns, it was often possible to coordinate and combine efforts.

"In the door-to-door we can assess their risk, which is different from being in a group. Door-to-door makes it a bit easier – you can have privacy and time to talk with someone individually."

When asked about stigma generated by door-to-door outreach, informants stressed they avoided stigma by going to all houses. Many outreach teams provided other health information or voluntary HIV testing and counseling during visits.

COMMUNICATION AND EDUCATION STRATEGIES

Participants stressed the importance of educating both potential PrEP users and the community as a whole.

"You find that when speaking to people [...] they sometimes don't believe what we are saying to them, they don't believe that the PrEP is really available because they haven't heard about it on radio, they haven't seen it in the newspaper [...] So, I think that we should involve the media as much as we can."

Informants advised that varied communication mechanisms should be used to publicize PrEP. They often used pamphlets or flip charts to provide information in clinics or at community events. Further, they suggested promoting word-of-mouth recruitment and reaching young people through celebrities or social media.

Rather than recommending successful messages, informants stressed what to avoid:

- Don't publicize that the product is for high-risk women or key populations. Rather, guide potential users in self-assessment of risk.
- Avoid all association with ARVs for treatment.
- Downplay HIV. Make the messages about empowering women to take control of their health.

KEY TAKEAWAYS FOR REAL-WORLD IMPLEMENTATION OF COMMUNITY-BASED STRATEGIES

Do proactive community outreach.

Health care providers offering PrEP need to move beyond the clinic and into the community to stimulate demand, facilitate access, and ultimately achieve high uptake.

Target the whole community, not just intended users.

Education by multiple channels must publicize PrEP availability, combat misinformation, and promote confidence in this novel prevention product.

Keep messaging positive.

PrEP should be promoted as a tool to empower women to protect their own health.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the following clinical research sites for participating in this research:

Botswana: CDC-Botswana, HIV Prevention Research Unit Malawi: Malawi College of Medicine John Hopkins University Clinical Research Site

South Africa: Center for the AIDS Programme for Research in South Africa, Desmond Tutu HIV Foundation Clinical Trials Unit, HIV Prevention Research Unit/Medical Research Council, Madibeng Centre for Research, MatCH Research Unit, Qhakaza Mbokodo Research Clinic, Setshaba Research Centre, The Aurum

Institute Tembisa CRS, Wits Reproductive Health and HIV Unit **Uganda:** Makerere University - John Hopkins University Research Collaboration and MRC/UVRI Uganda Research Unit on AIDS Zimbabwe: University of Zimbabwe College of Health Sciences - Clinical Trials Research Centre (UZCHS-CTRC)





1. Hegdahl H K, Fylkesnes K M, Sandoy I F 2016. Sex Differences in HIV Prevalence Persist over Time: Evidence from 18 Countries in Sub-Saharan Africa. PLoS One, 11, e0148502. 2. Celum C L, Delany-Moretlwe S, Mcconnell M, et al. 2015. Rethinking HIV prevention to prepare for oral PrEP implementation for young African women. J Int AIDS Soc, 18.

3. Cowan F M, Delany-Moretlwe S, Sanders E J, et al. 2016. PrEP implementation research in Africa: what is new? Journal of the International AIDS Society, 19. 4. Glidden D V, Anderson P L, Grant R M 2015. PrEP introduction for adolescent girls and young women. Clin Infect Dis, 60, 804-10.

5. Venter F, Cowan F, Black V, et al. 2015. Pre exposure prophylaxis in Southern Africa: feasible or not. J Int AIDS Soc, 18, 19979.

6. Marrazzo Jm R G, Richardson B, Gomez K, Mgodi N, Nair G, Et Al 2015. Tenofovir-Based Preexposure Prophylaxis for HIV Infection among African Women. N Engl J Med 7. Shisana O, Rehle, T, Simbayi Lc, Zuma, K, Jooste, S, Zungu N, Labadarios, D, Onoya, D 2014. South African National HIV Prevalence, Incidence and Behaviour Survey. HSRC Press.





OPTIONS Consortium Partners





responsibility of the authors and do not necessarily reflect the views of USAID, PEPFAR, or the United States Government