Trial of Enhanced Peer Referral with HIV Self-Testing on PrEP Initiation Among Young Kenyan Woman

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BACKGROUND

- In Africa, adolescent girls and young women (AGYW) have high HIV risk but low prevention engagement.
- AGYW's tight social connectivity may encourage uptake of prevention services, like pre-exposure prophylaxis (PrEP), which could be enhanced with peer referral and HIV self-testing (HIVST) delivery.

HYPOTHESIS

A formalized peer PrEP referral model with HIVST delivery will increase initiation among AGYW.

METHODS

- **Study design & setting**: A cluster-randomized controlled trial (NCT04982250) in central Kenya.
- **Eligibility criteria**: AGYW ≥16-24 years who had used PrEP in the past 12 months ("index peers").
- **Procedures:** Index peers were encouraged to identify and refer 4 peers who could benefit from PrEP ("referred peers"). To support peer referral, they received 4 referral cards (n=1/referred peer) with info on nearby PrEP clinics and were 1:1: randomized to:
  1) Enhanced peer referral: In-person group training on referral strategies; HIVST kits for delivery (n=8 kits, n=2 kits/referred peer); and HIVST & PrEP educational brochures (n=4, n=1/preferred peer).
  2) Standard peer referral**:** Informal referral strategies, representing the ongoing standard among AGYW.
- **Outcomes:** PrEP initiation*, PrEP continuation (any refill), HIV testing (any form; post referral). Binary outcomes among referred peers; reported by index peers 3 months following referral. (*primary outcome).
- **Analyses:** Risk differences (RD) with 95% confidence intervals (CI) were estimated w/ mixed-effect models.

Figure 1. Consort diagram

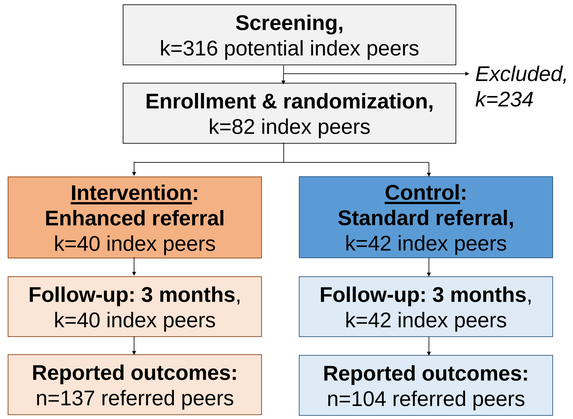


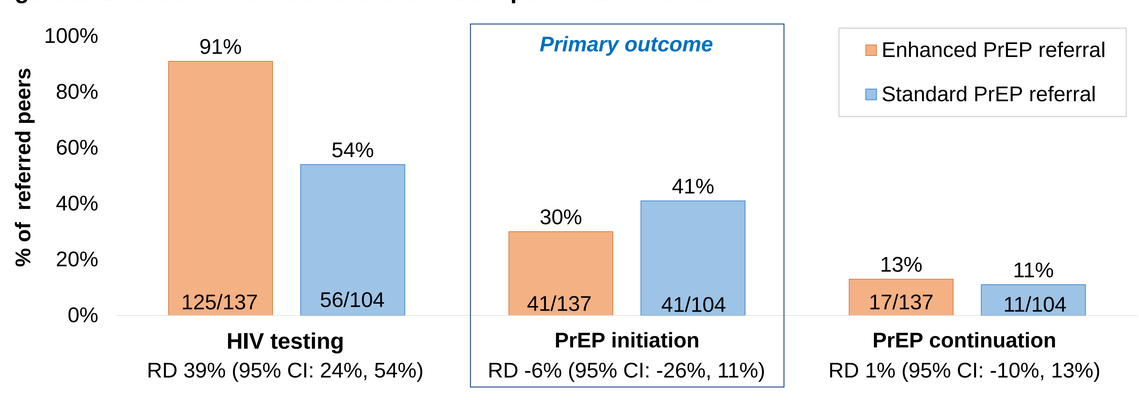
Table 1. Demographics of study participants

	Index peers		Referred peers*	
	Enhanced, k=40	Standard, k=42	Enhanced, n=137	Standard, n=104
Age; med [IQR]	22 [20; 23]	22 [21; 24]	21 [20; 23]	22 [20; 23]
Married	14 (34%)	17 (41%)	--	--
Casual sex partners	9 (23%)	9 (21%)	72 (53%)	58 (55%)
In school	8 (20%)	8 (19%)	--	--
PrEP use: at referral	27 (68%)	31 (74%)	--	--

*Limited demographics because data reported by index peers

Primary outcomes among referred peers, but reported by index peers (enrolled study participants) at follow-up

Figure 2. Effect of enhanced versus standard peer PrEP referral



RESULTS

- From May 2023 to June 2024, we screened 316 potential index peers and enrolled 82 who reported outcomes for 241 referred peers, **Figure 1.**
- The median age of index peers was 22 years (IQR 20-23) and of referred peers was 22 years (IQR 21-24); roughly half of referred peers had casual sexual partners (55%, 130/241), **Table 1**.
- At follow up, there were no significant differences in PrEP initiation or continuation among referred peers in the enhanced versus standard group, **Figure 2.**
- Recent HIV testing at follow up, however, was significantly higher among referred peers in the enhanced versus standard group, **Figure 2**. Three referred peers tested HIV-positive.

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Peer PrEP referral enhanced with education and HIVST delivery did not increase PrEP initiation or continuation, but did increase recent HIV testing among Kenyan AGYW.

CONCLUSIONS

- The intervention increased AGYWs' engagement in HIV testing, but this did not translate to increased engagement in PrEP.
- It is possible that AGYW in the enhanced group gained access to new information through HIVST—such as knowledge of their partner's HIV-negative status—which minimized their perceived PrEP need. It is also possible that without additional support, AGYW in the standard arm recruited fewer peers but ones with greater PrEP need.
- Future research is needed to identify additional implementation strategies to complement peer-delivered HIVST to improve PrEP engagement among AGYW who could benefit.

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