Pharmacy-based PrEP initiation and continuation in Kenya: findings from a pilot study

00928

Katrina F. Ortblad[1], Peter Mogere[2], Victor Omollo[3], Alexandra P. Kuo[4], Magdaline Asewe[3], Steven Gakuo[2], Hilma Nakambale[5], Melissa Mugambi[5] , Andy Stergachis[4,5], Josephine Odoyo[3], Elizabeth Bukusi[3,5,6], Kenneth Ngure[2,7], , Jared M. Baeten[8,9]

1Public Health Sciences Division, Fred Hutchinson Cancer Research Center, Seattle, USA, 2 Partners in Health and Research Development, Thika, Kenya, 3 Centre for Microbiology Research, Kenya Medical Research Institute, Nairobi, Kenya, 4 Department of Pharmacy, University of Washington, Seattle, USA, 5 Department of Global Health, University of Washington, Seattle, USA, 6 Department of Obstetrics and Gynecology, University of Washington, Seattle, USA, 7 Department of Community Health, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, 8 Department of Medicine, University of Washington, Seattle, USA, 9 Gilead Sciences, Foster City, CA, USA

BACKGROUND

- The delivery of oral HIV pre-exposure prophylaxis (PrEP) at retail pharmacies has the potential to mitigate existing barriers to clinic-delivered PrEP services, including HIV-associated stigma, long wait times, and understaffing.
- We pilot tested a model of pharmacy-based PrEP initiation and refills in Kenya – the first of its kind in sub-Saharan Africa.
- With this model, we aimed to understand the characteristics of the populations reached and measure PrEP initiation and continuation.

METHODS

- At five private, retail pharmacies in western and central Kenya, we piloted a model of pharmacy-based PrEP delivery developed in collaboration with Kenyan stakeholders (CT.gov: NCT04558554).
- In this model, trained pharmacy providers asked clients purchasing services that signaled potential HIV risk (e.g., emergency contraception, STI treatment) if they had ever considered taking PrEP.
- These providers screened interested clients for HIV risk (using Kenya's Rapid Assessment Screening Tool), counseled them on PrEP safety, tested them for HIV (using oral-fluid self tests), and prescribed and dispensed PrEP with support from a remote clinician, as needed, for clinically-challenging cases.
- Pharmacy providers were permitted PrEP prescribing authority for the pilot, and no additional staff provided PrEP care.
- We measured PrEP initiation among those screened and continuation (returning to the pharmacy and refilling PrEP no sooner than 15 days prior to the next scheduled visit) at 1, 4, and 7 months among those eligible for these follow-up visits.
- We categorized participants that refilled PrEP within 15 days of their scheduled visit as continuing "on-time" and those that refilled PrEP more than 15 days after this scheduled visit as "stopping and restarting".

RESULTS

- From November 2020 to October 2021, pharmacy providers screened 575 clients and initiated 287 (50%) on PrEP, **Fig. 1**.
- Among clients initiating PrEP (N=287), the median age was 26 years (IQR 22-33), 43% (n=124) were female, and 38% (n=108) were married. Most clients learned of pharmacy PrEP from the provider (43%, n=123) or via informal word-of-mouth referral (42%, n=120).
- PrEP continuation is described in **Fig. 2** and **Table 1.**

Fig. 1. PrEP initiation and HIV risk behaviors among clients screened

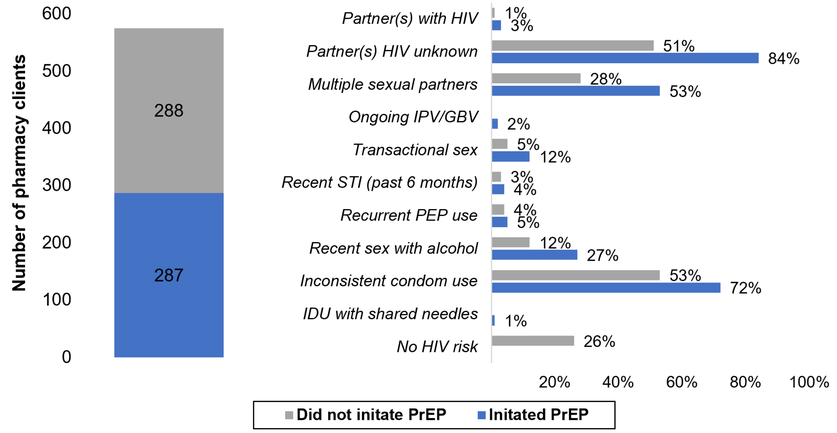
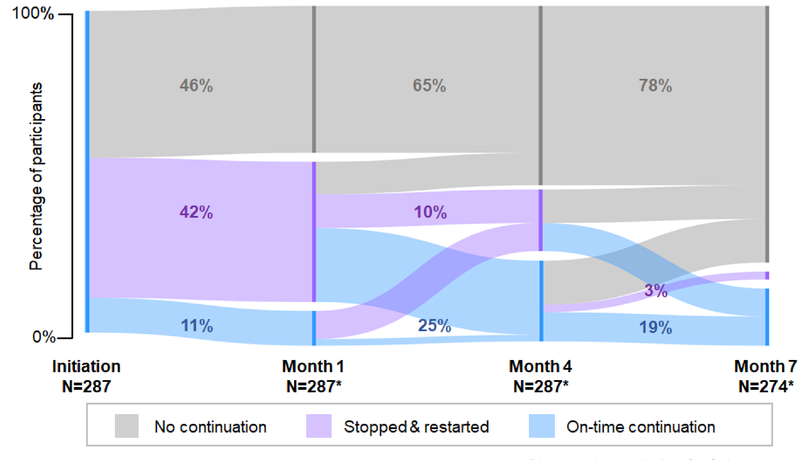


Fig. 2. PrEP continuation at 1, 4, and 7 months following initiation



*Among those eligible for follow up

Table 1. PrEP continuation at 1, 4, and 7 month following initiation

	Month 1[1]	Month 4[1]	Month 7[1]
All participants (N=287)	**N=287**	**N=287**	**N=274**
Retained in care (total window)[2]	156 (54%)	102 (36%)	58 (21%)
Tested HIV-positive[3]	0 (0%)	0 (0%)	0 (0%)
Continued PrEP[4]	152 (53%)	102 (36%)	58 (21%)
Adherent to PrEP: *# missed pills, past month (median, IQR)*	8 (2-20)	8 (3-16)	5 (1-9)

[1]Outcomes among those eligible for each follow-up visit, based on their date of enrollment.
[2]Participants that returned no sooner than 15 days prior to the next scheduled follow-up visit.
[3]Participants that returned to their follow-up visit within the retention window and tested HIV positive.
[4]Participants that returned to their follow-up visit within the retention window and refilled their PrEP medication.

Findings from this pilot suggest that populations at HIV risk frequently visit retail pharmacies and that PrEP initiation and continuation at pharmacies is similar to or exceeds that at public clinics in Kenya, according MOH data.

CONCLUSIONS

- Pharmacy-based PrEP delivery, conducted entirely by private-sector retail pharmacy staff, is a new delivery model that has the potential to expand PrEP reach and access in Kenya and similar settings.
- More research is needed on the effectiveness of and costs associated with this novel model of PrEP delivery to inform scale up.

ACKNOWLEDGMENTS

We would like to acknowledge all pilot pharmacy providers, pilot participants, and staff at Kenya Medical Research Institute in Kisumu and Partners in Health and Research Development site in Thika that contributed to this study.

FUNDING

National Institute of Mental Health (R34 MH120106, PI: K Ortblad)

CONTACT INFORMATION

Katrina F. Ortblad, Assistant Professor
kortblad@fredhutch.org