

Preferences for Long-Acting Antiretroviral Therapy Among People with HIV in Kenya: A Discrete Choice Experiment

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Background

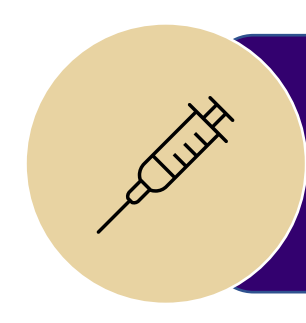
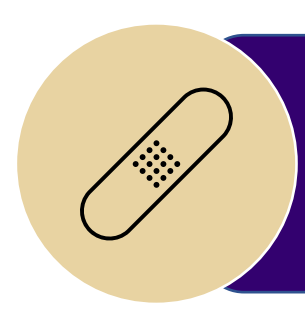

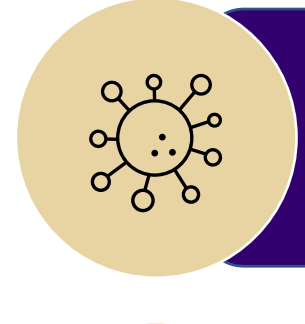
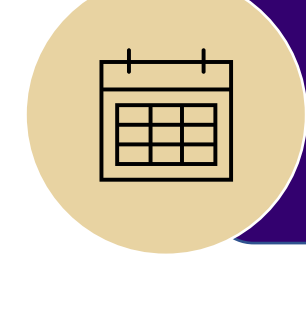

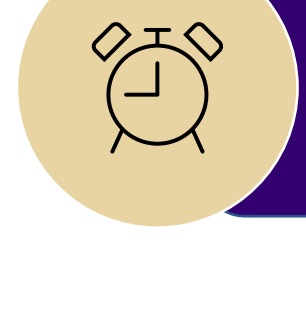
- In 2022, 1.4 million people were living with HIV in Kenya. 94% were on ART and 89% were virally suppressed.¹
- People with HIV (PWH) need to sustain high antiretroviral therapy (ART) adherence to achieve and maintain viral suppression.
- Novel long-acting ART (LA-ART) regimens may encourage ART initiation and improve adherence; innovations should align with client preferences to ensure acceptance and successful uptake.
- A discrete choice experiment (DCE) was previously conducted in the US to assess preferences for key attributes of LA-ART among US PWH.

Objective

To elicit client preferences for LA-ART product and delivery characteristics among PWH in Kenya.

Methods

Attributes and Levels

 Mode: Oral tablet, injectable, implant	 Pain: None, mild, moderate
 Location: Home, chemist (pharmacy), clinic	 Pre-treatment viral suppression: None, 3 months, 6 months
 Frequency: 1 week, 1 month, 2 months, 3 months, 6 months, 1 year	 Pre-treatment negative reaction testing: Needed, not needed
	 Late dose leeway: Short period, long period

Results

- Participants generally preferred hypothetical LA-ART alternatives to their current therapy.
- The most important attribute was mode of delivery interacted with pain level (Figure 2).
- Participants preferred oral LA-ART, administration at clinics, longer dosing intervals, no requirements for viral suppression or negative reaction testing prior to treatment, and longer leeway periods after a late dose.



Table 1: Participant Characteristics (N=700)

Age (years), Median (IQR)	36 (28-46)
Gender, N (%)	
Woman	449 (64.1%)
Man	248 (35.4%)
Transgender man	3 (0.4%)
Key population, N (%)	
Female sex worker	264 (37.7%)
MSM or male sex worker	96 (13.7%)
Fisher folk	3 (0.4%)
Sexual orientation, N (%)	
Straight	496 (70.9%)
Lesbian, gay, or bisexual	120 (17.1%)
Prefer not to say	74 (10.6%)
Other	10 (1.4%)
Time with HIV (years), Median (IQR) ¹	11 (6 - 16)
Time on ART (years), Median (IQR)	9 (5 - 15)
Viral load, N (%)	
Not detected	570 (81.4%)
< 40 copies/mL	10 (1.4%)
> 40 copies/mL	65 (9.3%)
Missing	55 (7.9%)

*Among those who did not acquire HIV at birth or via breastfeeding

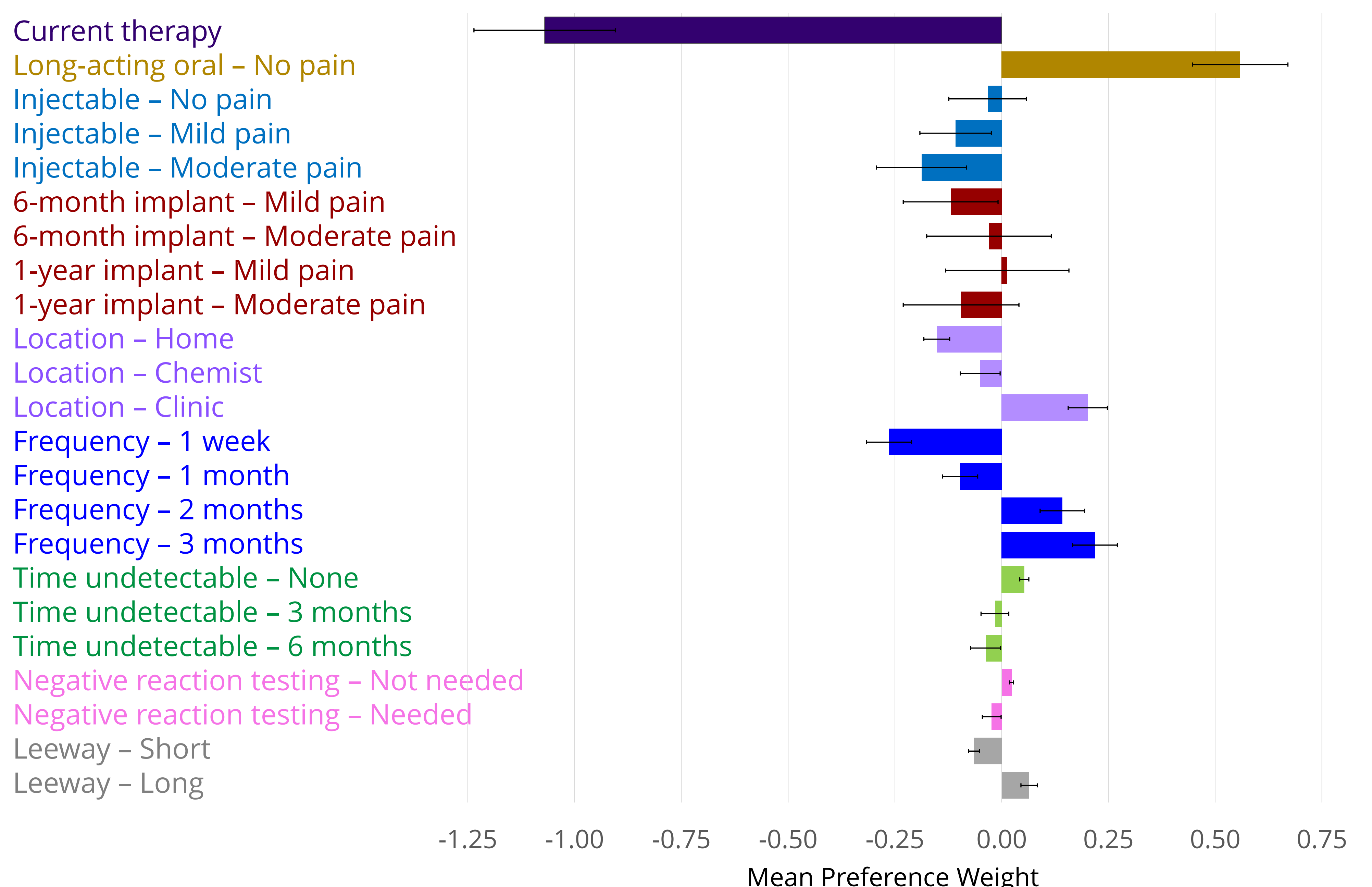
¹UNAIDS Country Factsheet: Kenya 2022.
<https://www.unaids.org/en/regionscountries/countries/kenya>

Figure 1: Example choice task

	Option A	Option B	Option C - your current therapy
Treatment type - How do I take this treatment?	Long-acting oral pills 	Injections under the skin 	
Location - Where would I get this treatment?	Home	Local chemist	
Frequency - How often would I get this treatment?	Once a week	Once a month	
Pain - How much pain would I feel?	None	Mild	
Pre-treatment time undetectable - How long would I need to be undetectable on daily pills before starting this treatment?	3 months	Not at all	
Pre-treatment side effect testing - Would I need to take daily pills to check for side effects before starting the treatment?	Needed	Not needed	
Late dose leeway - How late can I be for a dose of this treatment and still remain undetectable?	1 week	1 week	
Which do you prefer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- The US DCE was adapted and administered in Nairobi, Kenya.
- 700 participants were recruited from the Kenyatta National Hospital HIV clinic and Sex Workers Outreach Program clinics between January 2023 and February 2024.
- Participants provided sociodemographic and HIV-related characteristics and consented to linking their survey responses to their clinical data.
- In the DCE, respondents chose between two hypothetical LA-ART regimens and their current daily oral regimen in 17 choice tasks (example in Figure 1).
- Relationships between participants' choices and the LA-ART attributes were examined using conditional logistic regression, with an interaction between treatment mode and level of pain.

Figure 2: LA-ART Preference Weights



Conclusions

- Participants in Kenya strongly preferred the hypothetical LA-ARTs over their current daily oral therapy and demonstrated strong preference for clinic-based treatment.
- Oral LA-ART was consistently the most preferred treatment mode.
- Our findings suggest that all modes of LA-ART would likely be acceptable to PWH in Kenya, but oral formulations administered at a clinic are likely to be most acceptable.