# Session Title

Presenter

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# Preferences Regarding a Real-time Urine Assay for Monitoring and Providing Feedback on Pre-Exposure Prophylaxis Adherence among Women in Kenya

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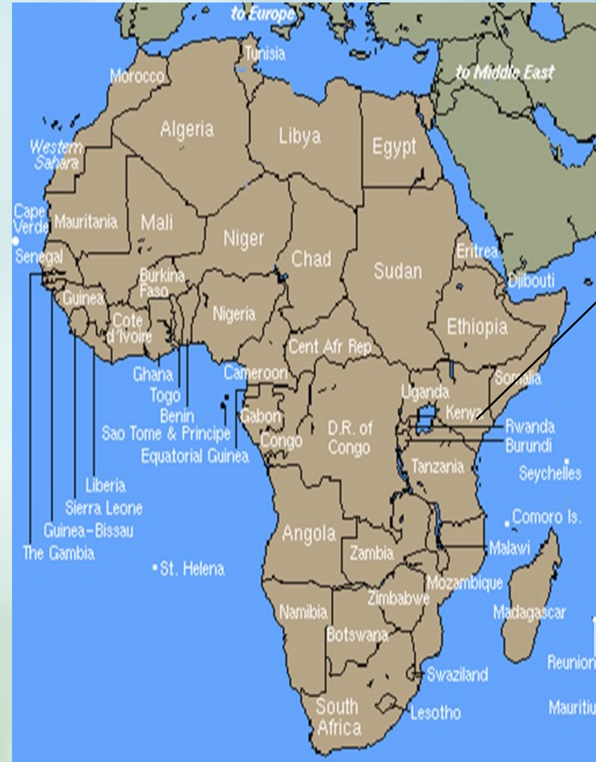
# Conflict of Interest

I have no conflicts of interest to disclose

# Background

- Women at risk for HIV but not in sero-discordant relationships need help remembering to take their pre-exposure prophylaxis (PrEP) pill every day.
- Real-time monitoring of PrEP drug levels with feedback could improve subsequent adherence.
- We sought to understand preferences about a novel urine assay for monitoring PrEP adherence among women at risk of acquiring HIV in Kenya.




Thika, Kenya

# Methods

- PUMA is a study evaluating the impact of implementing point of care (POC) urine tenofovir testing by providing real-time feedback on long-term PrEP adherence (PUMA trial: NCT03935464)

- Participants were purposively sampled from women enrolled on PrEP in the POC assay arm of PUMA trial.
  - Sampling was based on age group (<=25 or >25).

- Interviews were conducted after the final study follow-up visit at 12 months.

- Interviews were audio recorded transcribed and translated verbatim into English.

- We used rapid analysis to identify key themes related to point-of-care testing preferences.

# Results

Participant Demographics (N=38)

| Characteristic | Median (IQR) |
|---|---|
| Age | 30 years (24-37) |
| Level of Education | 10(8-12) |
| Parity | 2(1-3) |

# Clinic-based Testing

- Clinic-based testing was preferred by most participants due to the counselling provided.
- Clinic testing was also preferred due to additional tests conducted such as HIV, STIs or pregnancy tests.

*"Most times, here (clinic) you get to know many things. I will even come and get my weight measured… I will have my weight measured and get tested for HIV. Because when I come here, I not only have my urine tested but I will also get tested for HIV"* **(24 year old, married)**

# Clinic-based Testing

- Perceived accuracy of the test when conducted by a provider due to provider skills and aided result interpretation.
- Privacy in the clinic compared to home due to presence of family members or partners.
- The test acts as "evidence" encouraging clients to open up on reasons for poor adherence.

*"Because at home you do not have privacy. You see. When you come to the facility, it is between you and the provider. You go to the toilet, return…you test both of you and you get to see your results. But at home, you probably live with your sister, your mother, and your father. Everybody stays at home, so you may not get the chance"* **(24 year old, single)**

# Clinic-based Testing Concerns

- Feeling of discomfort with someone else handling your urine
- Lack of urine when at the clinic
- Fear of provider reaction when you receive poor adherent results.

*"You know that is your own urine, you just need to deal with it, handle your own urine. I would prefer the urine test at home. But the blood-based or hair test can be done from the clinic."* ***(25 year old, single)***

# Home-based Testing

- Participants who prefer home-based POC urine assay reported;
  - Convenience due to reduced clinic visits saving on time and transport to the clinic .
  - Smelly urine may cause discomfort at the clinic and may affect the client-provider relationship.

*"I would prefer testing alone, yes I stay at home…testing alone because those kits, one can be given many of them…five test kits for every month so there is no need of visiting the hospital. You just test secretly and throw it away, so I would prefer testing at home"* **(23 year old, single)**

# Home-based Testing Concerns

- Participants expressed;
  - Privacy concerns from partners and other family members.
  - Concerns about access and cost of the kit if rolled out.
  - Forgetting to test unlike clinic where clinic return date is issued.

*" I prefer the one for the hospital. If I am given this kit to take home, my baby can play with it and ask me questions about it and how will I respond to that. If I tell her it is used for collecting urine sample, she will ask me, "why urine mum?" And again my husband can pass there and wonder why I always test"* ***(34 year old, single)***

# Result Interpretation

- Participants expressed preference for an adherence test that would show drug levels – high, moderate or low
  - compared to the binary adherent/not adherent result displayed by the current test.

- Participants reported they would be motivated to consistently swallow PrEP to receive high adherence levels.

*"Because this (PrEP) medication gets inside the body and maybe I took twice and paused for a while and then took for a day; so you see it will show moderate because it (PrEP) is in the blood"* **(23 year old, single)**

# Conclusions

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- Clinic-based urine testing for monitoring PrEP adherence was highly preferred among women at risk.

- Future implementation of the novel urine assay to measure and deliver PrEP adherence information in real-time should consider routine testing in clinical settings to effectively support adherence among this population.

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