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COLLEGE OF PUBLIC HEALTH DIVISION OF EPIDEMIOLOGY

Preferences for PrEP delivery among FSW in Malawi using a discrete choice experiment

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BACKGROUND

Female sex workers (FSW) in Malawi have one of the highest HIV prevalence estimates worldwide.[1,2] Daily oral PrEP is an effective HIV prevention method, yet implementation strategies for optimizing PrEP delivery among FSW are lacking in Malawi and other sub-Saharan African settings.[3] Discrete-choice experiment (DCE) is a quantitative technique for eliciting preference by assessing how individuals value selected attributes of a program, product or service by asking them to state their choice over different hypothetical alternatives. This study used DCE to elicit preferences for PrEP delivery strategies among FSW in Lilongwe, Malawi.

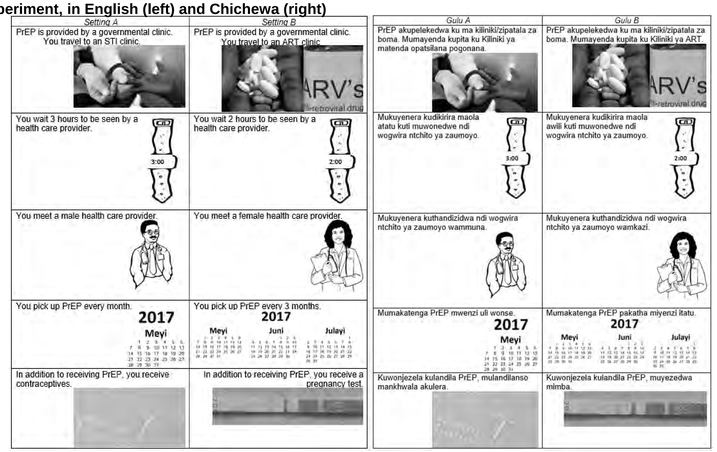
METHODS

After formative work involving focus group discussions, a literature review, and cognitive interviews, a DCE survey was developed with five PrEP attributes:

1. Dispensing location,
2. Clinic wait time,
3. Provider gender
4. Frequency of pick-up
5. Provision of additional services.

In June-August 2017, 150 HIV-negative FSW in Lilongwe were enrolled using venue-based sampling. Interviewer-assisted DCEs were administered along with a brief sociodemographic and behavioral survey. DCE data were analyzed within STATA using mixed logit regression to evaluate preferences for each PrEP delivery attribute. Mean level utilities and relative importance between least preferred and most preferred within attributes were also calculated across all respondents.

Figure 1. Sample choice task. Choice task shown to participants during presentation of the discrete choice experiment, in English (left) and Chichewa (right)



RESULTS

Figure 2. Preferences of PrEP delivery among female sex workers in Lilongwe, Malawi (n=150). Panel a) Relative utilities and 95% confidence intervals between least preferred and most preferred within attributes; Panel b) Mean level utilities of attributes and standard deviations

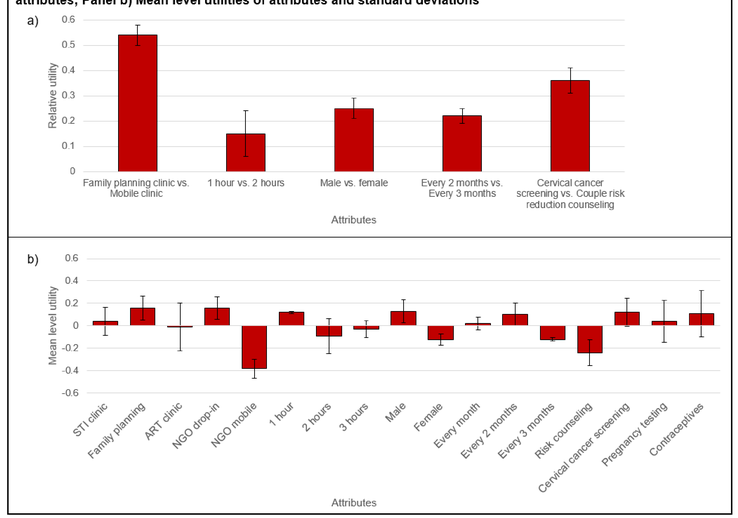


Table 1. Characteristics of HIV-negative FSW (n=150)

	n (%)
Age in years	
18-24	90 (60%)
25-29	42 (28%)
≥30	18 (12%)
Housing*	
Private house	38 (25%)
Bar or Bottle shop	67 (45%)
Guesthouse or hotel	43 (29%)
Duration of sex work in years*	
<1.0	20 (13%)
1.0-2.9	64 (43%)
≥3.0	60 (40%)
Condom use at last sex	
Yes	80 (53%)
No	70 (47%)

**Missing data due to not knowing or refused to answer: Housing: n=2; Duration of sex work: n=6

- Dispensing location was the most important factor (β or relative utility=0.54; 95% CI: 0.50, 0.58) for PrEP delivery.
- The second most important factor was the provision of additional services (β=0.36; 95% CI: 0.31, 0.41).
- Clinic wait time was the least important factor (β=0.22; 95% CI: 0.16, 0.26).
- Respondents preferred to receive PrEP at family planning clinics or at non-governmental organization (NGO) supported drop-in centers compared to STI clinics, ART clinics, or NGO supported mobile clinics.
- Male was the preferred provider gender.
- Respondents preferred picking up PrEP every 2 months to monthly or every 3 months.
- The preferred additional service was cervical cancer screening, followed by contraceptive provision
- Pregnancy testing and partner risk reduction counseling were preferred less.

CONCLUSIONS

- This was the first study to examine PrEP delivery preferences in Malawi using DCE-a powerful elicitation tool which can be applied within other FSW and key populations at risk for HIV.
- Dispensing location and the provision of additional services should be prioritized when designing and rolling out FSW tailored PrEP delivery strategies in Malawi.

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UNC PROJECT Lilongwe, Malawi

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