

# How might new HIV prevention products change incentives for risk in commercial sex work? Exploring the stated preferences of female sex workers in South Africa



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## Introduction

- Female sex workers (FSW) bear a substantial burden of the HIV epidemic in South Africa, with prevalence estimated to be as high as 70% in some areas<sup>1</sup>
- Estimates suggest 20% of the 350,000 annual HIV infections in South Africa are among persons connected with sex work<sup>2</sup>
- Antiretroviral-based pre-exposure prophylaxis (PrEP) is effective in preventing HIV infection<sup>3</sup>, and is increasingly being implemented in many contexts (including South Africa among female sex workers)<sup>4</sup>
- This study uses a framed **discrete choice experiment (DCE)** to explore how the introduction of new products could change incentives for risk in sex work, and whether condom use may be valued differently after the introduction of new biomedical prevention products
- Data are gathered from a respondent driven sample of 122 active female sex workers from Ekurhuleni Municipality, Gauteng

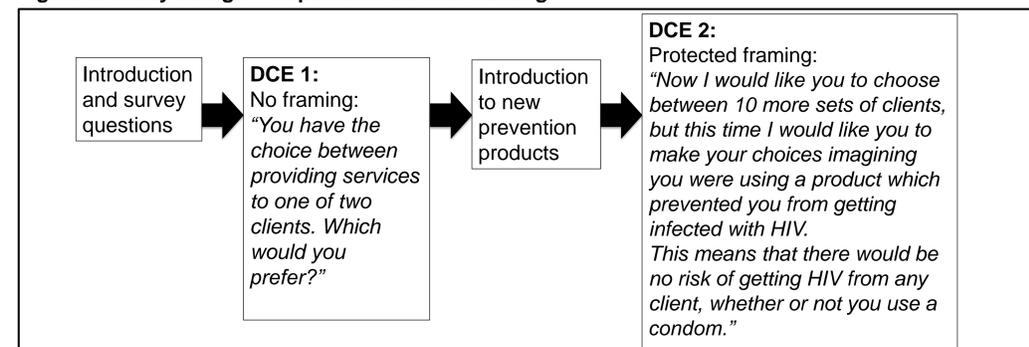
Figure 1: Discrete Choice Experiment Task

You have the choice between providing services to two clients. Which would you prefer?			
2 of 10	Client A	Client B	Neither
Condom	Male or Female Condom	No Condom	Would not provide services to either client
Sex	Anal sex	Vaginal sex	
HIV Risk	You don't think this client has HIV	You think this client has HIV	
STI Risk	You think this client has an STI	You don't think this client has an STI	
Price	50 Rand	400 Rand	

## Methods

- Participants were asked to complete a client DCE twice – firstly with no framing, and secondly with a framing of a choice under full HIV protection (Figure 2)
- Analysis compared DCE results via multinomial logit and random parameter logit discrete choice models
- The DCE was developed through four focus group discussions, input from sex workers and a FSW community advisory committee, a literature review, and extensive piloting

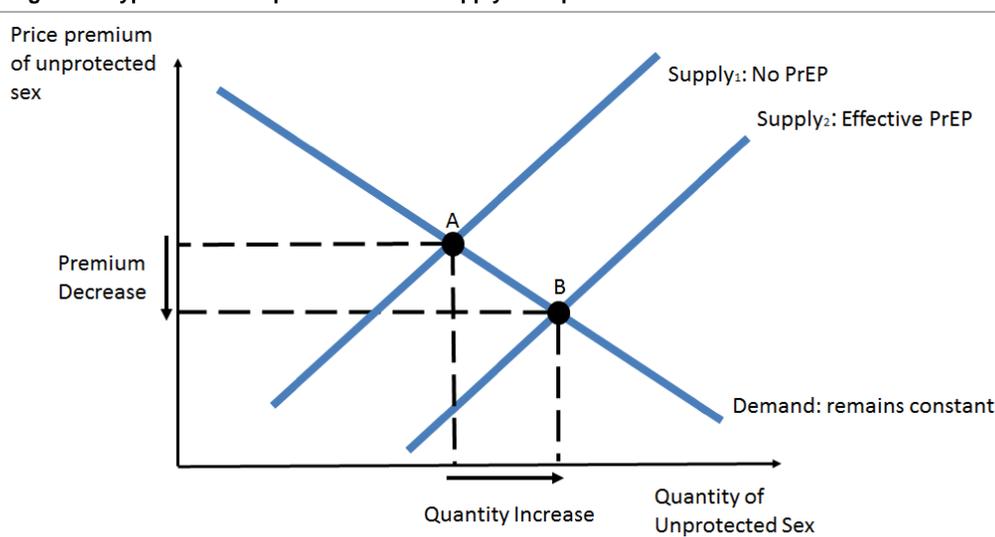
Figure 2: Study Design – Repeated DCE with framing



## Results

- Price is not currently important to FSW choice**, however, there is evidence suggesting **price will become an important factor** after the introduction of new HIV prevention products (Figure 3)
- There is indicative evidence that **condoms will be valued less** when new products are used

Figure 3: Hypothesised impact of PrEP on supply of unprotected sex



- The framing of protection was broadly understood by respondents, indicated by the non-significant HIV positive terms in DCE 2
- The price premium for unprotected sex is estimated to decrease by 70% after the introduction of effective prevention methods
- High self-reported condom use (>95%) suggests epidemiological impact may be limited

Figure 4: Random parameter logit – main effects



## Conclusions

- This is the first study to explore how incentives in sex work may be shaped by the introduction of new HIV prevention products
- Understanding pressures on FSWs to provide unprotected sex after the introduction of new HIV prevention products will be important to ensuring the success of these programmes**
- Programmes introducing new HIV prevention products should monitor their impact on protected and unprotected acts, alongside the prices paid for commercial sex
- DCEs offer an alternative and theoretically robust means of eliciting sensitive information from respondents in survey interviews



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