#### Factors associated with the high willingness to use Pre-exposure prophylaxis in female sex workers communities in Kampala, Uganda.

Author: Dr. Bashir Ssuna

#### **Co-Authors**:

- 1. Thomas Katairo
- 2. Assoc. Prof. Joan N Kalyango
- 3. Prof. Anne Katahoire
- 4. Dr. Flavia Matovu Kiweewa



IMPLEMENTATION SCIENCE PROGRAM

evidence 
practice

#### Introduction

- Globally, 1.8 million new HIV infections in 2018 and 54% occurred in key populations (UNAIDS, 2019). Of which female sex workers are part of the group
- Uganda had 50,000 new infections in 2017, 18% of these occurring in sex workers and their clients (Avert, 2019).
- The World health organization recommend pre-exposure prophylaxis (PrEP) which was found to be 70% effective in reducing new HIV infections in all populations (Fonner et al.,2016)
- In order to explore dynamics of PrEP acceptability and improve implementation, We conducted a cross-sectional study to determine the factors associated with willingness to use PrEP in female sex workers communities in Kampala, the capital city of Uganda.

### **Research objectives**

- 1. To determine the willingness to use PrEP in female sex workers communities in Kampala
- 2. To assess the factors associated with the willingness to use PrEP in female sex workers communities in Kampala
- 3. To document the perceptions about PrEP in female sex workers communities in Kampala

#### Methods

Study design: Explanatory sequential mixed methods study

**Sample size:** The survey included 121 adult female sex workers from their communities (place of work or residence) and 10 in-depth interviews

**Sampling:** We used snowball sampling to recruit the first participant from Mulago hospital sexually transmitted infections clinic

• Other participants were recruited from their specific hubs (bars, pubs...)

## **Data management and Analysis**

**Data collection:** We used Open Data Kit (ODK) for the survey and interview guide for in-depth interviews (IDI)

IDI – recorded in local language, transcribed and translated to English

Survey: Analysed using STATA 15.1/MP

- Willingness to use PrEP was measured as a proportion (Yes or No)
- Associated factors we used modified Poisson regression analysis (robust standard errors) to predict prevalence ratios (P-values)

**In-depth interviews:** Analysed using Atlas.ti 8.3 using general inductive method to generate codes, sub-themes and themes on perceptions about PrEP.

#### Results

- A total of 121 female sex workers were recruited for the survey. The mean age  $\pm$  standard deviation was 26 $\pm$ 5 years.
- Only 37 (30.6%) always used condoms and 80 (66.1%) used condoms irregularly.
- The willingness to use PrEP was 66.9% (95%CI 57.8-75.2), measured as a proportion.

#### The associated factors with willingness to use PrEP

- Age in years (aPR=0.95, P<0.001), being in urban area (aPR=1.34, P=0.017) compared to being in semi-urban area
- HIV testing in the past 6 months (aPR=1.85, P=0.007)
- Irregular use of condoms (aPR=0.77, P=0.014).
- Concerns about social stigma and discrimination, side effects of PrEP, pill burden and
- Failure to prevent pregnancy and infections were perceived to hinder PrEP use.

### Discussion

- Six (6) in 10 of the female sex workers were willing to use PrEP if offered to them, which is relatively high.
- This could be due to the perceptions they had about PrEP as being advantageous and will protect their lives.
- "... it will help me not to get infected because I want a longer life and I still have many things to do." (FSW7/IDI)

"... the reason why I refused is that I can't be taking it every day it's too much for me and they told me that if you start taking it you have to take it for the rest of your life." (FSW1/IDI)

• Similar findings have been reported in South Africa (Eakle et al., 2018), China (Ye et al., 2014)

#### **Discussion cont**....

- Younger female sex workers were more likely to accept use of PrEP than the older ones.
- Young ones perceived themselves at being on a greater risk of getting HIV due to high volumes of customers and associated risks like rape
- Female sex workers who tested for HIV in the past 6 months were more likely to accept use of PrEP than those who didn't.
- This is because of the difference in HIV risk perceptions

#### **Discussion cont**....

- Female sex workers who lived in urban areas were more likely to accept use of PrEP than those who lived in semi-urban areas.
- This is because Non-governmental organizations (NGOs) implementing PrEP are more focused in urban areas making them to be more informed about PrEP
- Female sex workers in the semi-urban areas had more negative perceptions about PrEP possibly due to lack of sensitization.

"... the main challenge I have with it and they told us that if you stop taking it you will get some problems." (FSW4/IDI)

# **Summary /Take home**

- We conducted a study to determine the factors associated with willingness to use PrEP in female sex workers communities in Kampala, Uganda.
- In order to explore dynamics of PrEP acceptability (willingness to use) and improve implementation.
- Six (6) out of 10 female sex workers were willing to use PrEP

#### **Summary cont...**

- HIV testing in the past 6 months and being in urban area were associated with higher likelihood to use PrEP
- Increasing age and irregular use of condoms were associated with less likelihood to use PrEP
- Concerns about social stigma and discrimination, side effects of PrEP and failure to prevent pregnancy or infections were perceived to hinder PrEP use.

### **Conclusions and Recommendations**

- There's relatively high willingness to take PrEP among FSWs communities.
- Implementing bodies should integrate PrEP awareness into HIV testing services
- Consider sensitization of the female sex workers about PrEP
- Further research to explore PrEP delivery, up-take and associated stigma

### Acknowledgements



IMPLEMENTATION SCIENCE PROGRAM

evidence practice

- The University of Zimbabwe College of Health Sciences Clinical Trials Research Center (UZCHS-CTR)
- Makerere University Implementation Science (Mak-ImS) staff
- Makerere University Clinical Epidemiology Unit staff
- NIH Fogarty scholarship (award number D43 TW010037)