

# Determinates of Pre-exposure prophylaxis (PrEP) willingness uptake in a population survey

Presenter: **Mafanato Maluleka** (Masters Intern Candidate)

Authors: M Mabaso, N Dukhi, G Maseko, R Swepual, L Makola, I Naidoo, S Sifunda, S Moyo, & M Zungu

# Brief Overview

- Introduction
- Problem
- Methodology
- Results
- Discussion
- Impact

# Introduction

- ▶ Since the beginning of the global HIV epidemic, 74.9 million persons have been infected and 32 million have died, with 38 million people currently living with HIV (Celum & Baeten, 2020).
- ▶ South Africa has the major HIV epidemic in the world, with 8.45 million people living with HIV in 2022, representing 20% of the global HIV burden (Beesham et al., 2021).
- ▶ Sub-Saharan Africa (SSA) has the highest number of people living with HIV (Smith et al., 2023). Young women and girls in sub-Saharan Africa account for 3 million of the 4 million people aged 15-26 with HIV in the region.
- ▶ In 2016 South Africa adopted a policy on Pre-exposure prophylaxis (PrEP) which made it the first country in Sub-Saharan Africa to implement PrEP.
- ▶ When PrEP was first introduced in South Africa in 2016 it was only available for sex workers.
- ▶ Since 2018 access to PrEP in SA has been expanded and is currently accessible and available in public sector health facilities within the country.
- ▶ Globally over 1 million has initiated oral PrEP, with over 100 000 people in South Africa (Beesham et al., 2022)



# Problem

- ▶ For adults aged 15-49 years, an estimated 19.1% of the population is HIV positive
- ▶ Adolescent populations are particularly vulnerable to HIV, and oral PrEP in these populations is likely to have an impact on population-level HIV incidence.
- ▶ In South Africa, the use of PrEP among young women remains low although it has been publicly available (Firoza, 2022).
- ▶ By providing effective PrEP services for high incidence groups is a critical measure to decrease new HIV infections

# Methodology

## Characteristics of the sample

This analysis is based on the 2017 South African National HIV Prevalence, Incidence, and Behaviour Survey, a nationally representative population-based household survey, described in detail elsewhere. Study participants were selected using multi-stage stratified cluster sampling.

A systematic probability sample of 15 households was drawn from each of 1000 enumeration areas (EAs) selected randomly from strata

A detailed questionnaire soliciting information related to: demographics, HIV-related attitudes, practice, behaviours, and knowledge was administered.

## Measures

This analysis focused on the socio-demographic and Prep willingness uptake on survey population.

## Dependent variable

The primary outcome measure for the study is PreP willingness which is based on the following question "Scientists are now studying a medication where, if taken orally every day, can reduce a person's chances of getting HIV infection. If such a medication was available, would you want to take it? (yes=1 and no=0), and must be sexually active defining as had sex in the last 12 months, and must be 15 years and 55+ older.

# Methodology continues...

- ▶ Independent variables
- ▶ Explanatory variables included the socio-demographic
- ▶ Risky sexual behaviour variables such sexual risky behavioural variables included the age at sexual debut (15 years or more than 15 years), age-disparate sexual partnerships (partner within 5 years, partner 5 years younger, and partner 5 years older), number of sexual partners in the last 12 months (one partner, two or more sexual partners), condom use at last sexual intercourse, consistent condom use during sexual contact
- ▶ HIV related variables such as ever tested for HIV , awareness of HIV status (no and yes), correct HIV knowledge and myth rejection (yes, no), self-perceived risk of HIV infection (yes, no). HIV status (positive and negative).
- ▶ The statistical analysis was done in STATA 15 software using svy commands considering the complex multi-level survey design.
- ▶ Descriptive statistics was used to summarise socio-demographic, risky sexual behaviour, HIV related variables characteristics of the study sample, and by PreP willingness

# Results

- ▶ Total number of 16557 of the population, which were males and females 15 years and 55 + older
- ▶ Socio-demographic characteristics of the sample. The population was slightly dominated by the participants who were aged between 25 and 34 years (34.8%), and majority of respondents were males (53.8%).
- ▶ Amongst the responded majority (78.8.4%) were Black Africans. (59.9%) and 60.8% have never been married.
- ▶ Approximately 70.5% had a secondary educational level with 71.5 % from the urban area.
- ▶ Risky sexual behaviour variables such sexual risky behavioural variables included the age at sexual debut (more than 15 years), age-disparate sexual partnerships (partner within 5 years, partner 5 years younger, and partner 5 years older). Majority of respondents 89 % had one sexual partners in the last 12, with 63.1 % condom use at last sexual intercourse. Majority of respondents 98.7% shown no consistent condom use during sexual contact.
- ▶ HIV related variables such as ever tested for HIV indicates that about 83.1% have tested and are aware of their HIV status. Low self-perceived risk of HIV (78.6%) among respondents.

# Discussion

- ▶ Most of the population survey aged (25-34 years) reported that they are willing to take up PreP.
- ▶ The overall willingness to take up PreP was significantly higher among participants 15-24 years at 83.1% (95% CI, 81.1-84.9:p<0.001) and lower among 55+ at 53.7%.
- ▶ Willingness to take up PreP was significant for participants who had two or more partners in the last 12 months at 83.7 (95% CI, 80.8-86.2:p<0.001).
- ▶ High self-perceived risk of HIV participants are willing to take up PreP.
- ▶ Whereas high use of condom responded also resulted with willingness to take up PreP.



# Results and Discussion

**sample (n = 16 557)**

- ▶ Insert a table

# Impact

- ▶ These findings support the need to design a strategy which will increase more knowledge on PrEP and easy accessibility at health facilities.
- ▶ The results indicate that people are willing to take up PrEP especially young people therefore educative interventions at schools are required to inform the population on the positive impact of PrEP.
- ▶ PrEP is highly effective at preventing HIV infection, among adolescents it will decrease the infection of HIV
- ▶ Our study provides an important finding on gender differences in PrEP willingness uptake.

# Thank you