Age Differences in Oral PrEP Continuation among Female Sex Workers and Young Women in South Africa

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Catherine G. Schluth[1], Katherine B. Rucinski [1], Mfezi Mcingana[2], Jenny McLoughlin[2], Amrita Rao[1], Chitra Singh[2], Nombuso Matenjwa[2], Nosipho Dladla[2], Joel Steingo[2], Venessa Chen[1], Stefan D. Baral[1], Harry Hausler[2,3], Sheree R. Schwartz[1]
[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA, [2]TB HIV Care, Cape Town, South Africa, [3]University of Pretoria, Pretoria, South Africa

BACKGROUND

- HIV risk among cisgender women in South Africa is heterogeneous across subpopulations, with adolescent girls and young women (AGYW) and female sex workers (FSW) at disproportionately high risk of HIV acquisition.
- While PrEP is an effective HIV prevention intervention, its impact in South Africa has been limited by limited PrEP continuation among service users.
- This study aimed to fill gaps in our knowledge of age-specific differences in PrEP continuation among AGYW and FSW in South Africa.

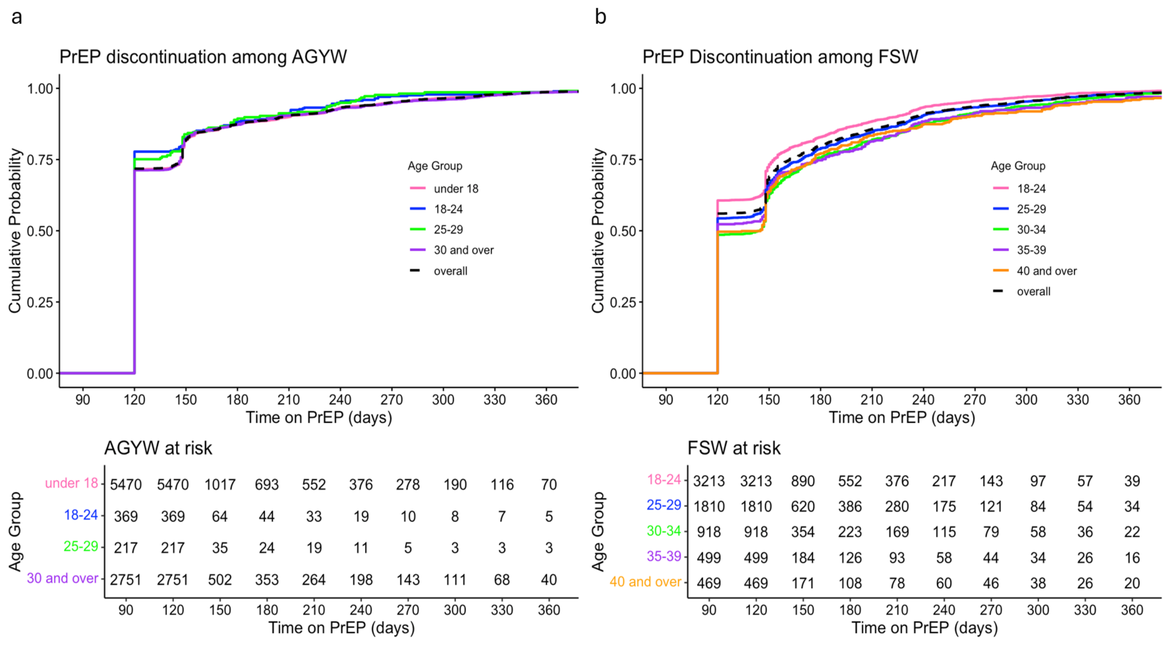
METHODS

- This study leveraged clinical files for 8807 AGYW and 6909 FSW across 9 districts who initiated oral PrEP through TB HIV Care, a leading PrEP provider in South Africa, from April 2017-December 2021.
- Discontinuation was defined as not returning for a PrEP refill within 120 days of last PrEP pick-up (dispensing was ≤90 pills at each visit + 30-day lateness window). Cumulative failure analyses, stratified by age at initiation, assessed incidence of PrEP discontinuation over time.
- Multivariable logistic regression models using age group, district, and initiation year as covariates identified correlates of PrEP continuation at 120 days after initiation.

PLAIN LANGUAGE SUMMARY: Daily oral pre-exposure prophylaxis (PrEP) is an effective HIV prevention medication, but young women in South Africa — especially those engaged in sex work — face challenges with continuation on the drug. Efforts to improve PrEP's effectiveness in South Africa should prioritize the needs of young women, especially given their high vulnerability to HIV.

Real-world data demonstrate rapid drop-offs in oral PrEP use among women – especially young FSW – in South Africa, making long-acting coverage a priority in this population at acute risk for HIV.

Figure 1a. Cumulative probability of PrEP discontinuation by age group at enrollment among AGYW enrolled on oral PrEP through TB HIV Care in South Africa (April 2017-December 2021). **1b.** Cumulative probability of PrEP discontinuation by age group at enrollment among FSW enrolled on oral PrEP through TB HIV Care in South Africa (April 2017-December 2021).



RESULTS

- Cumulative incidence of PrEP discontinuation 120 days after initiation was **71.8% for AGYW and 56.0% for FSW (Figure 1)**. By one year after initiation, nearly all AGYW and FSW had experienced a 120-day gap in PrEP continuation.
- Older AGYW (aged 25-29) were less likely to continue on PrEP 120 days after initiation than younger AGYW (aged 18-24) **(adj OR = 0.62, 95% CI = 0.48-0.80).**
- Younger FSW (aged 18-24) were less likely to continue on PrEP 120 days after initiation than those aged 25-29 **(adj OR: 1.21, 95% CI: 1.07-1.37),** 30-34 **(adj OR: 1.45, 95% CI: 1.24-1.69),** 35-39 **(adj OR: 1.30, 95% CI: 1.06-1.58),** and ≥40 **(adj OR: 1.38, 95% CI: 1.13-1.69).**

CONCLUSIONS

PrEP continuation varied by age across populations of women at high risk of HIV acquisition in South Africa. These data underscore the need for PrEP support strategies designed with young women, particularly younger FSW and older AGYW, in mind. Long-acting PrEP formulations and efforts to address structural barriers to PrEP continuation could mitigate adherence challenges and help optimize PrEP's prevention impact in South Africa. However, rapid drop-offs in PrEP continuation among women in this study may foretell challenges with long-term retention in care, even among women seeking long-acting PrEP solutions.

AUTHOR CONTACT: cschlut4@jh.edu

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