

# Predictors of Pre-Exposure Prophylaxis uptake and continuation among Adolescent Girls and Young Women during the COVID-19 pandemic in KwaZulu-Natal, South Africa

Many AGYW who elected to initiate PrEP were taking STI treatment or had an STI in the previous 6 months. Programs offering PrEP for AGYW should also integrate STI testing, targeted STI vaccination and may also be useful in conducting surveillance of STI infection and resistance in this population

## BACKGROUND

- Adolescent girls and young women (AGYW) continue to bear the unequal burden of HIV infection in South Africa (SA).
- In SA, the KwaZulu-Natal (KZN) province is the epicentre of the HIV epidemic in SA and has become a hyper endemic setting for the spread of HIV among AGYW.
- The COVID-19 virus was first detected in March 2020, and the SA government imposed movement and lockdown restrictions to curb the spread of the COVID-19 virus.
- These pandemic control measures created additional barriers to accessing HIV preventative services.
- Against this background we aimed to describe the predictors of PrEP initiation and continuation among AGYW aged 15 - 24 years enrolled in an HIV prevention combination program during the COVID-19 pandemic in a high HIV burden setting like KZN within the context of the COVID-19 pandemic.

## METHODS

- Retrospective cohort study using secondary programmatic data from a program for AGYW aged 15 - 24 years operating in 5 clinics in the uMhlatuze municipality, King Cetsoyo district of KZN.
- PrEP initiation was defined as the number of AGYW who initiated its use during at their first visit.
- PrEP continuation was defined as having at least 1 record of follow up after PrEP initiation.
- Log-binomial regression was utilised to evaluate factors associated PrEP initiation and PrEP continuation.

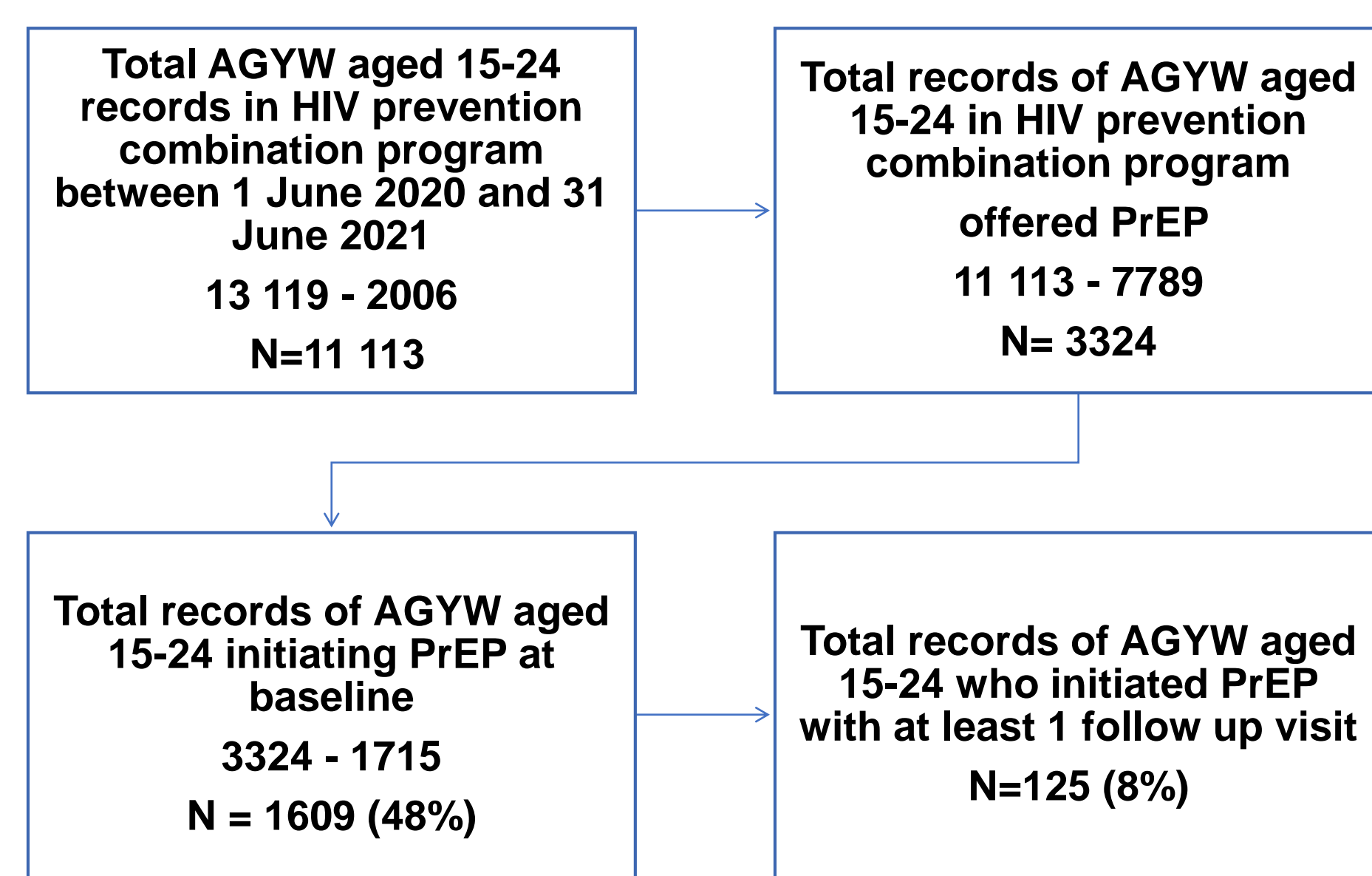


Fig 1: Flowchart outlining final sample size

## RESULTS

- Less than half (48%) of AGYW initiated PrEP, and only 8% had one record of follow up and majority (71%) of PrEP initiates were aged 19 to 24.
- 26% reported using a condom at their last sexual encounter and 18% of PrEP initiates had practiced transactional sex in the last 6 months.
- 12.4% were currently taking STI treatment and 6.5% of PrEP initiates reported having an STI in the 6 months prior to initiating PrEP pills.

- Participants who reported living in a safe home environment had a 50% increased likelihood of initiating PrEP services than those who had an unstable home environment.
- The likelihood of initiating PrEP increased by 80% among those who used a condom at their last sexual encounter.
- Participants that were currently taking STI treatment had an approximately 60% increased likelihood of initiating PrEP services
- Participants who reported an STI in the previous 6 months were twice as likely to have initiated PrEP than those that did not.

**Table 1: Factors associated with PrEP initiation among AGYW enrolled in the HIV prevention program in uMhlatuze, KwaZulu-Natal (N=1609)**

Variable	Initiated PrEP N=1609	Unadjusted RR (95% CI)	Adjusted RR (95% CI)
Environment at home was safe	413 (96.0%)	1.5 (0.9 - 2.4) *	1.3(1 - 1.6) **
Currently on STI treatment	200 (12.4%)	2.1 (2 - 2.2) ****	1.7(1.2-2.3) ****
Had an STI in the last 6 months	104 (6.5%)	1.6 (1.4 - 1.8) ****	2.1(1.5-2.8) ****
Used a condom at their last sexual encounter	310 (70.0%)	1.9 (1.6 -2.2) ****	1.8(1.2-2.8) ***

For univariable analysis variables with  $p \leq 0.1$  were regarded as statistically significant. In the multivariable analysis variables with  $p \leq 0.05$  were regarded statistically significant. Variables with  $p \leq 0.001$  \*\*\*\*, variables with  $p \leq 0.01$  \*\*\*, variable with  $p \leq 0.05$  \*\*, variables with  $p \leq 0.1$  \*

## CONCLUSION

- We observed moderate uptake and poorer continuation of PrEP services in this study and more than 90% of PrEP initiates had no record of follow up use.
- Lockdown restrictions implemented to curb the transmission of COVID-19 at the time of the study may have impeded access to services.
- Many PrEP initiates were on STI treatment and those who had an STI in the 6 months prior to initiating PrEP had elected to initiate PrEP medication.

## RECOMENDATIONS

- Programs offering PrEP should integrate STI testing services, targeted vaccination for AGYW and conduct surveillance of STI infection and resistance in AGYW.
- PrEP programs should consider telehealth approaches including mobile technologies, direct to client delivery of PrEP pills and the option to collect medication from community centres to ensure uninterrupted access to PrEP in routine and crisis moments.

## ADDITIONAL KEY INFORMATION

Sincere thanks to Dr. Rita Sonko and the team at Strategic Analytics Management who provided data used in this study.