Outcomes From a Multilevel Trial With Clinics and Young Women for PrEP in South Africa

#1345

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BACKGROUND

Adolescent girls and young women (AGYW) account for 25% of new HIV infections in South Africa. PrEP may be an ideal option to reduce HIV incidence among AGYW. However, its impact may be tempered by structural and individual-level barriers to access and use. Therefore, there is a need to develop and test multi-level interventions to support AGYW to initiate PrEP.

INTERVENTIONS

Clinic-Level: The Health Policy Plus (HPP) Project Health Facility HIV Stigma and Discrimination (S&D) Reduction Training that addresses lack of understanding of S&D, fear of workplace HIV transmission, and clinic staff attitudes. It was adapted to address S&D toward AGYW seeking SRH services, including PrEP, in public clinics.

Individual-Level: The Young Women's (YW) CoOp is an evidence-based HIV prevention intervention to increase individual knowledge and skills to reduce substance use and increase personal power around HIV risk behaviors. It was adapted to include information about PrEP and contraception.

METHODS AND MEASURES

We conducted a cluster-randomized trial using a factorial design in 12 clinics and their respective catchment areas from April 2019 to June 2022 to assess the efficacy of a multilevel intervention to increase PrEP uptake, adherence, and persistence among 802 AGYW, 15 to 24 years old, who reported engaging in condomless sex in the past 3 months.

Study Arms:

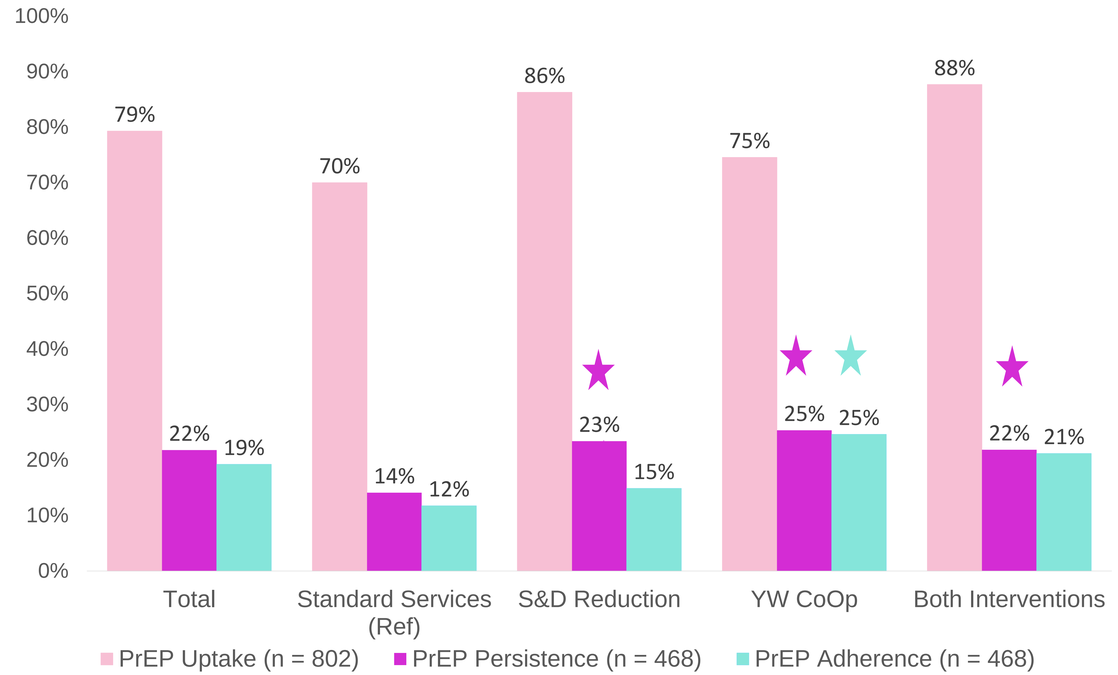
- **Standard Services -** Standard clinical services
- **S&D Reduction**- Clinics received the HPP
- **YW CoOp**- AGYW assigned to receive the YW CoOp
- **Both Interventions-** Clinics received the HPP and AGYW assigned to receive the YW CoOp

Outcome Measures:

- **PrEP uptake** - Medical records indicated a filled

RESULTS

Figure 1. PrEP Uptake, Adherence, and Persistence, as Measured by Medical Records and Dried Blood Spots by Arm



AGYW in the S&D Reduction (OR = 2.50; CI =0.42, 14.79) and Both Interventions YW (OR = 2.94; CI 0.41, 21.93) arms had higher odds of PrEP uptake compared to the Standard Services arm, but this was not statistically significant.

AGYW in the YW CoOp arm had higher odds of taking at least four PrEP doses per week compared to the Standard Services arm (OR = 2.74, CI = 1.26, 5.94) .

AGYW in the S&D Reduction (OR = 1.89, CI = 1.09, 3.22), YW CoOp OR = 2.32, CI = 1.99, 2.71), and Both Interventions (OR = 1.82, CI = 1.31, 2.52) arms had higher odds of persisting on PrEP compared to the Standard Services arm.

Table 1. Demographics of AGYW Enrolled in Study (N = 802)

	Total (SD/%)	Standard Services	S&D Reduction	YW CoOp	Both Interventions
	802 (100%)	200 (24.9%)	175 (21.8%)	224 (27.9%)	203 (25.3%)
Age in years, mean	19.91 (2.3)	19.91 (2.4)	20.14 (2.3)	19.81 (2.2)	19.84 (2.4)
In a relationship	703 (87.7%)	181 (90.5)	157 (89.7)	194 (86.6%)	171 (84.2%)
Economic insecurity	255 (31.8%)	60 (30%)	48 (27.4%)	74 (33.0%)	73 (36.0%)
Food insecurity	106 (13.2%)	21 (10.5%)	23 (13.1%)	29 (13.0%)	33 (16.3%)

ANALYSIS

- Separate logistic regressions, accounting for clustering, were used to assess the effect of study arm on PrEP uptake, adherence, and persistence.
- Models adjusted for lifetime physical abuse and age.

LIMITATIONS

- PrEP uptake was measured using prescription data; therefore, it is not possible to know if an AGYW took an initial dose.
- Our measure of persistence was limited to assessing use of PrEP within 1–2 weeks of a study visit via DBS.

CONCLUSIONS

- While PrEP uptake was high overall, PrEP persistence and adherence measured with biomarkers of use, were low over 9 months.
- Nonetheless, PrEP adherence was higher among AGYW who received the YW CoOp.
- PrEP persistence was higher in all intervention groups.
- Findings offer evidence of the impact of a stigma reduction training and a young woman-focused intervention to improve PrEP outcomes among AGYW.
- The study complements South Africa's National Strategic plan for HIV and findings should be used to inform decision-making.
- Results underscore the challenges to oral PrEP adherence among AGYW and the importance of choice with alternative PrEP options that overcome challenges to adherence.

FUNDING INFORMATION

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