PrEP Use Trajectories Among Women Initiating PrEP in Pregnancy

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BACKGROUND

- HIV incidence remains a significant concern among pregnant and postpartum women.
- The World Health Organization (WHO) recommends oral PrEP for pregnant/postpartum women in high-burden settings
- Unique attributes of pregnancy and the postpartum period may influence persisting with daily oral PrEP use

OJBECTIVE

- To evaluate patterns of oral HIV PrEP use after initiation among pregnant and postpartum women with high HIV risk

METHODS

- Data from a randomized trial in Western Kenya (February 2022–September 2024; NCT04472884)
- 600 pregnant women, with high HIV risk, initiating daily oral HIV PrEP.
- Followed up from 3rd trimester through 9 months postpartum
- Cox proportional hazards models to estimate time to PrEP discontinuation
- Poisson regression with robust SE to estimate PrEP discontinuation following stillbirth or neonatal loss

Want to follow-up?
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52% of women discontinued HIV PrEP during the perinatal period. Pregnancy loss was associated with 2.5x risk of discontinuing PrEP.

RESULTS

Figure 1: PrEP use and non-use across the perinatal period, among women with high HIV risk

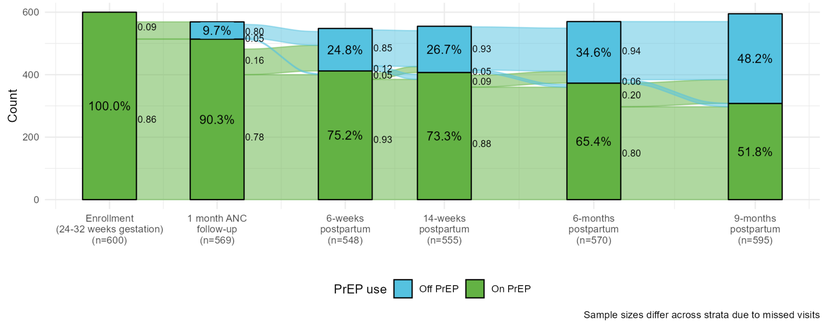
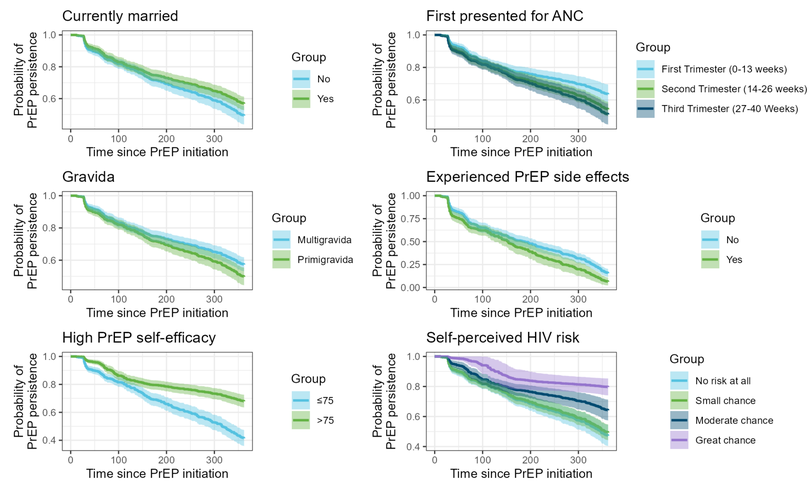


Figure 2: Cox PH of time PrEP discontinuation after PrEP initiation



- 312 (52%) discontinued PrEP at least once before 9-months postpartum
- Median time to first discontinuation was 5.8 months (IQR: 2.2-10.7).
- Women frequently discontinued HIV PrEP in pregnancy (16%) and at 6-months postpartum (20%) (Figure 1)
- 12.5% women who discontinued subsequently restarted PrEP.
- Women who experienced stillbirth or neonatal loss were over twice as likely to discontinue PrEP compared to women without loss (RR: 2.56, 95% CI: 1.35-4.85, p=0.03).

Women were more likely to discontinue HIV PrEP…

- **if they started ANC in their second trimester,** (HR: 1.61, 95% CI: 1.14-2.28, p=0.007) **or third trimester** (HR: 1.85, 95% CI: 1.22-2.81, p=0.004), compared to women who started ANC in their first trimester
- **if they were primigravida** (HR: 1.40, 95% CI: 1.09-1.80, p=0.008).
- **if they experienced side effects** on oral PrEP (HR: 1.66, 95% CI: 1.19-2.31, p=0.003).

Women were less likely to discontinue HIV PrEP…

- **if they had high pill-taking self-efficacy** (HR: 0.28, 95% CI: 0.20-0.39, p<0.001).
- **if they had moderate self-perceived HIV risk** (HR: 0.45, 95% CI: 0.27-0.75, p=0.002) **or great risk** (HR: 0.08, 95% CI: 0.02-0.29, p<0.001) compared to women with no self-perceived HIV risk.

Characteristic	N = 600
Age	25.0 (22.0, 29.0)
Currently married	427 (71.2%)
Polygamous	45 (10.6%)
Secondary education or higher	380 (63.3%)
Regular employment	126 (21.0%)
Travel time to clinic (> 1 hour)	59 (9.8%)
First presented for ANC	
First Trimester (0-13 weeks)	103 (17.2%)
Second Trimester (14-26 weeks)	372 (62.0%)
Third Trimester (27-40 Weeks)	125 (20.8%)
Primigravida	218 (36.3%)
Prior pregnancy loss	78 (13.0%)
Partner HIV status	
HIV negative	34 (5.7%)
Partner living with HIV	16 (2.7%)
Unknown status	514 (85.7%)
No current partner	36 (6.0%)

CONCLUSIONS

Interventions that enhance self-efficacy and refine risk perception could help promote PrEP persistence for pregnant women who initiate PrEP. Strengthening integrated maternal and HIV PrEP support, especially for women who are primigravida, have side HIV PrEP effects, or experience perinatal loss, could also address PrEP persistence challenges.

PLAIN LANGUAGE SUMMARY

About half of women in western Kenya stopped taking HIV PrEP at least once before nine months postpartum. Women were more likely to stop if they started antenatal care later, experienced side effects, or had a stillbirth or newborn loss, while women who felt confident taking their pills and believed they were at risk for HIV were more likely to continue.