

A prospective analysis of PrEP adherence and depressive symptoms among Kenyan women who initiated PrEP during pregnancy and postpartum

Anna Larsen¹, John Kinuthia², Mary Marwa², Julia Dettinger¹, Laurèn Gomez², Joshua Stern², Felix Abuna³, Ben Odhiambo², Nancy Ngumbau², Pascal Omondi², Jared Baeten³, Jillian Pintye¹, Grace John-Stewart¹

¹University of Washington; ²University of Nairobi/Kenyatta National Hospital; ³Gilead Sciences

Background

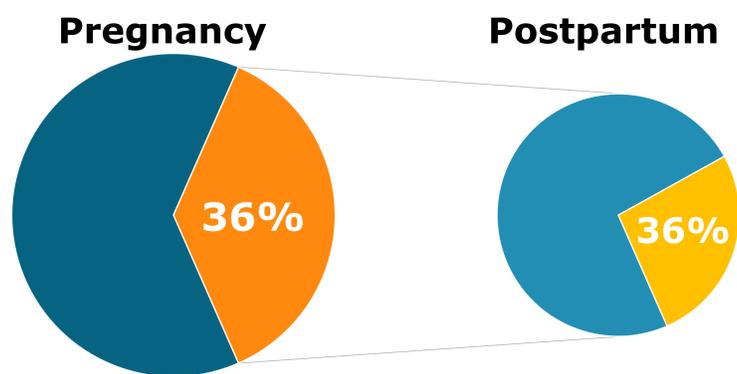
- Prior studies report suboptimal adherence among depressed PrEP users.
- Yet, few data exist on psychosocial factors associated with PrEP adherence in pregnant and postpartum women.
- We evaluated potential relationships between psychosocial factors and PrEP adherence among Kenyan women who initiated PrEP during the perinatal period.

Figure 1. Study nurse administering questionnaire to postpartum Kenyan women



Depression was common among Kenyan perinatal PrEP initiators, yet not associated with PrEP adherence

Figure 2. Prevalence of MSD among PrEP initiators in pregnancy and postpartum



- Perinatal MSD was associated with:
 - Having a partner of unknown HIV status
 - ≥4 lifetime sexual partners
 - Intimate partner violence (IPV)
 - Low social support (p<0.05)

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Methods

- We prospectively analyzed data from the PrIMA Study (NCT03070600) among participants who initiated PrEP during pregnancy or postpartum to identify psychosocial correlates of adherence.
- Depressive symptoms were assessed serially (pregnancy, 6 weeks, 9 months postpartum) using the Center for Epidemiologic Studies Depression scale (moderate-to-severe depressive symptoms [MSD]=scores≥10).
- Optimal PrEP adherence (self-reporting no missed PrEP pills in the last 30 days) was evaluated monthly in pregnancy; 6 weeks, 14 weeks, 6 months, 9 months postpartum.

Results

- We included 715 women who initiated PrEP during pregnancy or postpartum
- Median age: 25 years (IQR:21-30)
- Median gestational age at PrEP initiation: 29 weeks (IQR:24-33)
- The majority (88%) of women were married, and 19% had a partner living with HIV

Table 1. Factors associated with PrEP adherence among Kenyan perinatal women (n=715)

Factor	aRR	95% CI	p-value
Pregnancy vs. postpartum (n=3856 visits)	1.5	1.4-1.6	p<0.001
Maternal age: >24 years	1.2	1.0-1.3	p<0.008
Partners living with HIV	1.6	1.4-1.7	p<0.001
MSD in past 6 months	1.02	0.93-1.14	p=0.643

Adjusted Relative Risk (aRR); Confidence Interval (CI)
Correlates of PrEP adherence were identified using generalized estimating equation models, clustered by participant, adjusted for age, parity, education, partner HIV status, and pregnancy status.

Marital status, IPV, and social support were not associated with PrEP adherence

Conclusions

Among perinatal women who initiated PrEP, self-reported adherence was higher in pregnancy than postpartum, among older women, and those with partners living with HIV. In contrast to studies of non-pregnant women, PrEP adherence was not associated with depression. Our findings suggest that the impact of psychosocial barriers to PrEP adherence may be attenuated among perinatal populations.