



Trends in Interruptions in Treatment Among Men, Pregnant Women and Non-Pregnant Women: Retrospective Cohort Study in Zambézia Province, Mozambique (2013-2021)



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Background

- Since the Prevention of Mother-to-Child Transmission (PMTCT) Option B+ strategy commenced in Mozambique in July 2013, comprehensive antiretroviral therapy (ART) initiation guidelines for all persons living with HIV (PLHIV) have evolved from CD4-based thresholds to universal ART (Test & Start strategy) beginning in 2016.
- We evaluated proportions of adult PLHIV groups, specifically, pregnant women (PW), non-pregnant women (non-PW), and men, experiencing an interruption in treatment (IIT).
- We herein describe trends in IIT outcomes over time among these three PLHIV groups.

Methods

- A retrospective cohort study was conducted involving adult (≥ 15 years of age) PLHIV who initiated ART between July 2013 and June 2021 in 107 health facilities in nine districts in Zambézia Province, Mozambique.
- Routine patient-level data were used to summarize temporal trends in proportions of PW, non-PW, and men experiencing an IIT.
- IIT was defined as having no clinical contact for 28 days after the last scheduled/anticipated clinical contact:
 - Less than 3 months after ART initiation ("IIT <3m");
 - Within 3-5 months after ART initiation ("IIT 3-5m").
- Mixed-effect logistic models were built with district as random effect and splines on the time variable.

Results

- Data from 228,628 adults were included, 25.5% PW, 40.4% non-PW, and 34.1% men.
- Overall, monthly IIT <3m proportions for each group decreased from approximately 55% to 20% from 2013 to 2021.
- Decreases in the proportions of PW experiencing IIT <3m were more pronounced compared to non-PW and men, especially between 2016-2019, with improvements (decreased IIT <3m) being seen in all PLHIV groups from 2019 on.
- Similarly, the proportions of all PLHIV groups experiencing IIT 3-5m decreased from 2013-2021 (~65% to ~18% for PW, ~50-55% to ~20-25% for non-PW and men), with some variability seen within individual PLHIV groups. In addition, higher proportions of PW experienced an IIT 3-5m from 2013 to early 2016, while non-PW and men had biennial increases in IIT 3-5m from 2013-2018.
- After 2018, IIT 3-5m trends decreased consistently for all groups.

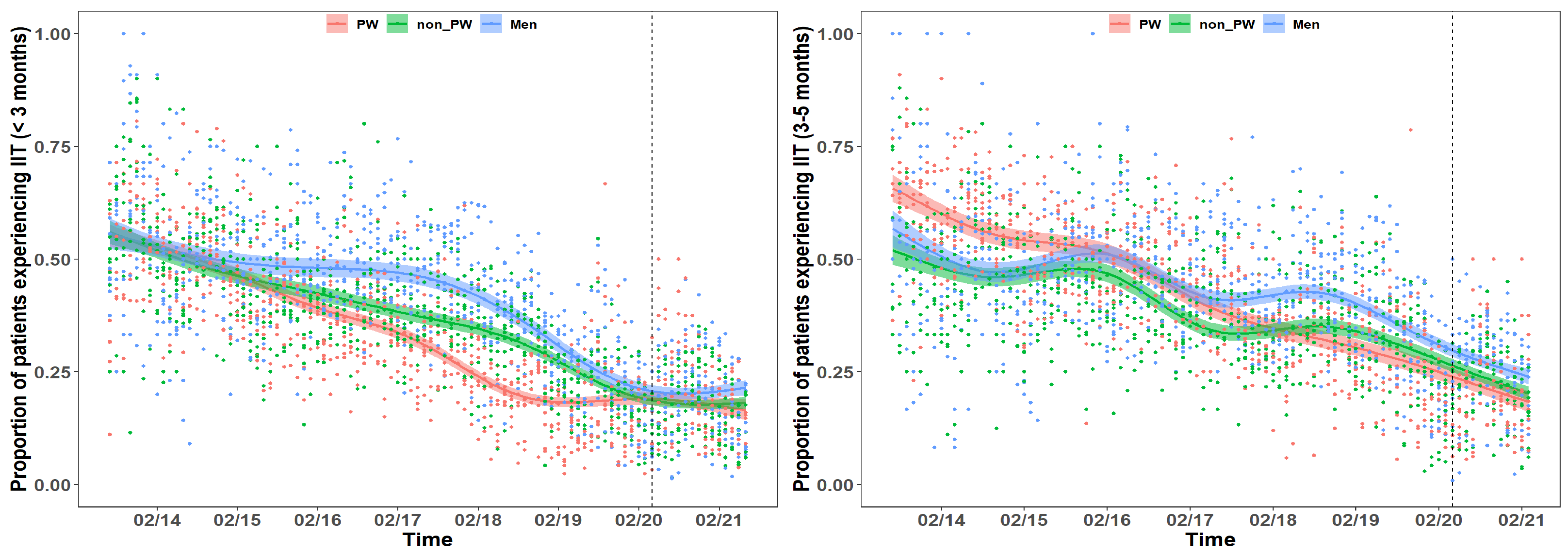


Figure. (left) Monthly proportions of patients experiencing an IIT less than 3 months after initiating ART, by adult group, over time. (right) Monthly proportions of patients experiencing an IIT within 3-5 months after initiating ART, by adult group, over time.

Conclusions

- Trend analysis showed a prominent decrease in short (<3 months) and intermediate (3-5 months) treatment interruptions in Zambézia Province for all three adult PLHIV groups.
- Men and non-PW had overall slightly higher proportions of IIT, with significant improvements being seen among these groups following the introduction of the Test & Start strategy, while the established Option B+ strategy showed continued positive effect for PW.
- Though trends are reassuring on early retention for adults, continued efforts are needed to ensure sustained effect.