

Correlates of experiencing continued interruption in treatment among people living with HIV in Geita, Tanzania, 2020-2022

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Background

There are approximately 1.5 million PLHIV receiving antiretroviral therapy (ART) in Tanzania. Achieving and sustaining epidemic control requires minimizing their interruptions in treatment (IIT), defined as no clinical contact for at least 28 days following the last appointment. Although many factors associated with IIT are known, there is limited evidence on the drivers of continued IIT, especially in geographic regions like Geita with predominant seasonal economic activities such as fishing and mining. This analysis aimed to identify the correlates of continued IIT among PLHIV in Geita, Tanzania.

Methods

De-identified patient-level data were used to examine continued IIT; defined as PLHIV with IIT who never returned to treatment or had prolonged IIT. We retrospectively examined a cohort of PLHIV with one or more IIT by the end of fiscal year (FY) 2020 (n=11,172). PLHIV with continued IIT by May 2022 (n=9,082) were compared with those who returned to treatment (n=2,090) within this same period. Modified Poisson regression was used to model the associations of PLHIV's socioeconomic and clinical characteristics with experiencing continued IIT. The models used robust variance estimation to account for facility-level clustering of PLHIV and reported prevalence ratios (PR) and 95% confidence interval (95%CI).

Results

Overall, 81% of the PLHIV cohort in our study experienced continued IIT. PLHIV with stage IV disease were 8% more likely to experience continued IIT [aPR 1.08, 95%CI: 1.02-1.15]. Not being on dolutegravir-based regimen was associated with 48% increased likelihood of continued IIT [aPR 1.48, 95%CI: 1.33-1.65]. Being on ART for less than a year was associated with 20% increased likelihood of continued IIT [aPR 1.20, 95%CI: 1.16-1.25]. Additionally, being a male, lack of treatment supporter, and not initially identified by community health workers were associated with continued IIT.

Conclusion

This analysis showed the magnitude and potential drivers of continued IIT in Geita, which can inform similar assessments in Tanzania and elsewhere. The widespread continued IIT is a major threat to achieving and sustaining HIV epidemic control. Interventions targeting males and use of treatment supporters may be beneficial in improving continuity of treatment, especially in geographic areas with seasonal movement patterns.



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