Challenges Faced by Perinatally-Infected Young People Living with HIV in Kenya During the COVID-19 Pandemic

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INTRODUCTION

Background

- The COVID-19 pandemic prompted global restrictions such as social distancing measures and travel bans to limit the spread of SARS-CoV-2.
- People living with HIV may have faced treatment interruptions due to restrictions imposed by the COVID-19 pandemic, which may have resulted in incomplete adherence to antiretroviral therapy (ART), development of drug resistance, and subsequent progression of HIV.
- The clinical, psychosocial, and socioeconomic impact of COVID-19 related restrictions on young people living with HIV (YPLWH), who are already at risk of disengagement from the clinical system, virological failure, and poor clinical outcomes, is largely unknown.

Objective

- To describe psychological, physical, and socioeconomic challenges experienced by YPLWH in western Kenya and characterize their impact on the HIV care.

METHODS

- This cross-sectional study was carried out at four AMPATH HIV clinics in and around Eldoret, Kenya, between Feb 2021-Jul 2022.
- YPLWH were initially enrolled in an ongoing longitudinal parent study assessing the impact of HIV drug resistance on clinical outcomes, followed clinically, and, subsequently, reenrolled in the current study.
- Enrolled participants verbally completed surveys, utilizing validated measures when available to assess psychological, physical, and socioeconomic challenges.
- Blood samples were also collected and analyzed for HIV viral load (VL) at the AMPATH Reference Laboratory.
- COVID-19-related events, restrictions, and interventions in Kenya were compiled in a pandemic timeline.
- Challenges measures were summarized overall and according to VL levels. Trends in these measures were further examined using generalized additive modeling.

RESULTS

- 442 participants were enrolled in the present study. Participant demographics are shown in **Table 1**.
- At least one challenge was reported by 89% of participants, with 48% psychological, 66% physical, and 62% socioeconomic challenges (**Figure 1**).
- Trends of challenges over time were stable for all but physical challenges, which decreased in parallel with social distancing measures (**Figure 2**).
- COVID-19-related events, restrictions, and interventions occurred in Kenya prior to and throughout the study period (**Figure 3**).

Table 1: Participant Demographics (N = 442).

Variable		Count (%)
Age (years)	5-14	106 (24)
	15-24	334 (76)
	25+	2 (0)
Gender	Female	218 (49)
Clinic site	MTRH	260 (59)
	Kitale	49 (11)
	Turbo	69 (16)
	Webuye	64 (14)

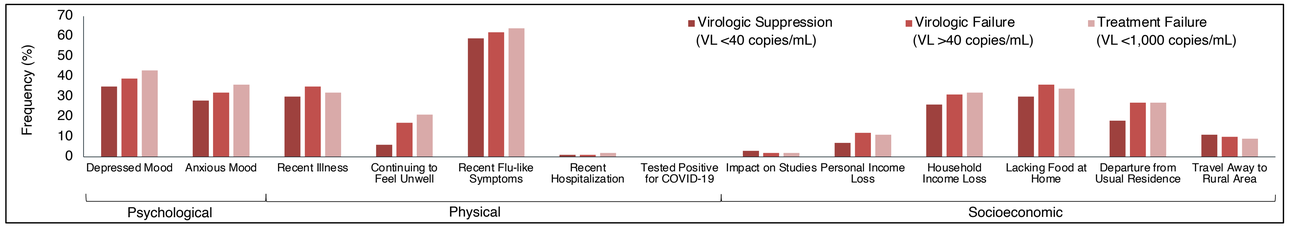

Figure 1: COVID-19 Related Psychological, Physical, and Socioeconomic Challenges.

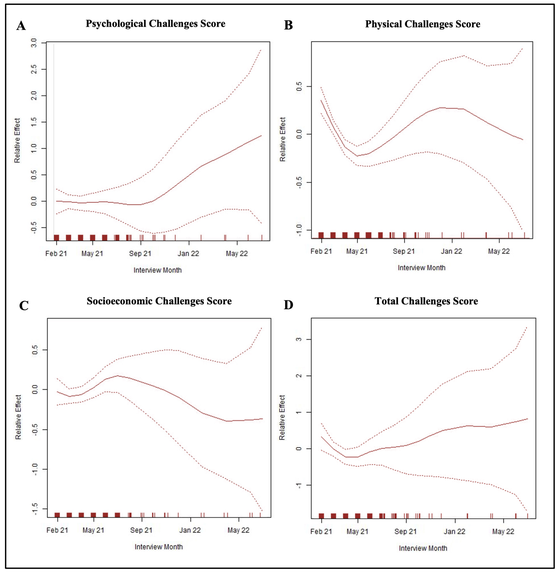

Figure 2: Trajectories of challenges across enrollment months

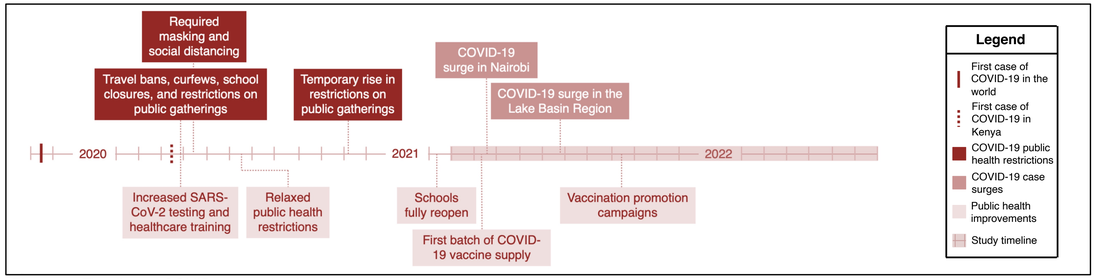

Figure 3: Timeline of COVID-19 pandemic-related societal changes in Kenya.

CONCLUSIONS

- Most Kenyan YPLWH experienced wellness challenges during the COVID-19 pandemic, conceivably due to pandemic-imposed restrictions and possibly impacting HIV care.
- Wellness challenges reported by YPLWH were high but mostly stable throughout the study period, suggesting intervention opportunities during pandemics, even at times of improved restrictions.
- Anticipating and addressing such challenges during current and future public health crises before they lead to HIV treatment failure could significantly improve clinical outcomes within this vulnerable population.

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