

Title: Factors affecting viral suppression in children and adolescents living with HIV in Kenya: an evaluation of individual and system level challenges

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Background: While progress has been made in HIV management in adults, reaching the UNAIDS and Kenyan goal of 90% virologic suppression for children and adolescents living with HIV (CALHIV) has remained a national challenge. In 2017, 66.80% of children (0-9 years) and 66.0% of adolescents (10-19 years) in HIV care had achieved virologic suppression. Understanding the varied challenges that clients, caregivers, and health care workers (HCW) face is critical to close CALHIV virologic suppression gaps.

Methods: We selected 27 health facilities for investigation; Facilities were selected depending on their performance on viral suppression compared to the National VL suppression average. High performers were facilities who had achieved suppression rates higher than the National average (above 80%,) while low performers were those facilities with performance lower than the National average (below 66%) . 6 facilities were sampled as “high performers” (highest rates of virologic suppression nationwide in CALHIV ages 0-19 years) and 10 were sampled as “low performers” (lowest rates of virologic suppression). 11 Facilities were also selected for having high numbers of CALHIV on non-standard regimens who had a high virological failure rate. Nonstandard regimens are defined as combination of regimens that fall outside the national recommendation for pediatric and adolescent regimen for first and second VL. At each facility, up to 20 CALHIV health records were randomly selected and abstracted (10 children, 10 adolescents), including information about treatment history, weight-based dosing, ART regimen, viral load testing, and other clinical management. Additionally, up to 2 focus group discussions (FGDs) were conducted at each facility with caregivers of children, and adolescent clients; data were collected about the challenges in HIV treatment adherence, disclosure, and basic knowledge on viral load and its interpretation, knowledge of HIV, understanding about formulations and associated side effects. Finally, at each facility data were collected about the availability of commodities, policies, and systems related to CALHIV treatment and virologic management.

Anticipated results: We will share information about the multiple sources of challenges that clients, caregivers, and HCW face and compare the challenges between high and low performing facilities. These factors will possibly include system-level challenges (such as commodity procurement, availability of weighing materials and dosing charts, availability of disclosure assistance tools), individual challenges (such as absence of psychosocial support groups, drug storage, timing of treatment, boarding vs day school, adverse experiences during disclosure, etc.).