



Children have been left behind during the HIV 90-90-90 strategy implementation in South Africa

To the Editor: Worldwide, children still lag in accessing HIV services,^[1] despite the Sustainable Development Goals and the UNAIDS 95-95-95 strategy highlighting the critical need for focus on children and adolescents.^[2] By 2020, only half (53%) of HIV-infected children globally were on antiretroviral therapy (ART), compared with two-thirds (68%) of adults.^[1] This discrepancy also exists in South Africa (SA). In 2019, among adults, 93% had known HIV status, and 71% of those who were positive were recipients of ART, with 61% virally suppressed. Children had much lower rates: 77%, 63% and 63%, respectively.^[3,4]

Recent City of Johannesburg data indicate that children on ART had constantly lower viral load suppression rates compared with adults throughout the 90-90-90 strategy implementation period.^[5]

Case-finding has received priority attention from SA health services and international funders.^[6] However, poor retention in care and inadequate viral suppression threaten programme success. Left unattended, this situation leads not only to high morbidity and mortality in children but also to the

development of a cohort of young adults with high levels of drug resistance, placing control of the epidemic at risk.

Challenges to retention and adherence to ART in children include child-unfriendly ART formulations (such as unpalatable or large-volume syrups), non-availability of fixed-dose combinations, and formulations requiring refrigeration.^[7] Inadequate supervision and poor health literacy of caregivers, poor caregiver-child relationships and support systems, and non-disclosure to the child and other family members of his/her HIV-positive status further hinder adherence.^[8,9]

We have to do more to ensure that children are initiated on ART, remain in care, and achieve virological suppression. We suggest five key interventions that can change the trajectory of HIV care for SA children (Table 1).

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Table 1. Recommendations to improve retention, adherence and viral suppression among children

Intervention	Feasibility
1. Fast-tracked approval and introduction of new paediatric ART formulations, ^[7] including simplified regimens with once-daily dosing and no storage requirements. ^[10]	Formulations approved in other countries, and in alignment with our treatment guidelines, are available, including smaller dose ABC/3TC tablet co-formulations, LPV/RTV pellets, DTG 10 mg, and others.
2. Community education on paediatric HIV and demand creation for services to increase acceptability of HIV testing and treatment.	Mass media campaigns could change the public perception that children living with HIV do not survive and thrive.
3. Prioritise children for early tracing and/or linkage to care during routine ART tracing processes. ^[7]	Tracing processes include file reviews to verify missed appointments. This could identify priority patients for tracing, including children.
4. Investigate and validate mechanisms of low-volume blood collection, thereby reducing the burden of paediatric phlebotomy.	GeneXpert technology available for use in TB diagnostics can analyse viral load with low volumes of blood using capillary tubes.
5. Integrate HIV care and support interventions into community support structures, including orphan and vulnerable children programmes. ^[9]	Several community-based structures provide support services for vulnerable children.

ART = antiretroviral therapy; ABC/3TC = abacavir/lamivudine; LPV/RTV = lopinavir/ritonavir; DTG = dolutegravir; TB = tuberculosis.

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