RIATT
Eastern & Southern Africa
Regional Inter Agency Task Team on Children & AIDS

STRENGTHENING PAEDIATRIC HIV TESTING IN THE EASTERN AND SOUTHERN AFRICA REGION






A POLICY BRIEF

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1. INTRODUCTION

This policy brief outlines proposed policy alternatives to addressing paediatric HIV testing – related challenges being experienced in the Eastern and Southern Africa (ESA) region.

Evidence for the policy brief was documented through an assessment of the National Paediatric Testing Guidelines and Advocacy in this region that was commissioned by Regional Inter-Agency Task Team on Children & AIDS.

2. BACKGROUND AND CHALLENGE

Countries in the ESA region have made remarkable progress in scaling up treatment for pregnant women living with HIV and reducing new infections among children[1]. However, the coronavirus outbreak that began in 2019 (COVID-19 a respiratory illness) threatened to reverse years of hard-won gains in preventing and treating HIV in general[2]. In 2017, 70% (93,000) of the reported new infections in children (0-14 years) worldwide were in the 21 priority countries (20 of which are the ESA region)[3]. Data available so far indicates that the advent of COVID-19 resulted in reduced quality of care for HIV/AIDS patients. One modeling study indicated that cessation of Prevention Mother to Child Transmission (PMTCT) activities due to COVID-19 was likely to lead to significant increases in the number of new child infections (Optima HIV and Goals models): 78% in Malawi, 37% in Mozambique, 104% in Uganda, 78% in Zimbabwe[4].

Identifying and diagnosing children as HIV-infected is the first step in the continuum of paediatric care and treatment. Early infant diagnosis, is insufficient unless combined with other testing strategies which reaches children, and these include[5]:

i. Testing all children of adults receiving any HIV service (PMTCT, CARE, ART) through either facility or home-based index case testing
ii. Testing children attending tuberculosis (TB) clinics, malnutrition clinics, or admitted to inpatient paediatric wards
iii. Testing children receiving Orphan and Vulnerable Children (OVC) Services
iv. Screening mothers or infants attending immunization or under-5 clinics to identify HIV-Exposed infants, especially in high prevalence settings (>5% adult HIV prevalence).

National policies, guidelines and testing algorithms should be reviewed and aligned to new innovations as we move towards HIV epidemic control.

5. THE ASSESSMENT OF NATIONAL PAEDIATRIC TESTING GUIDELINES AND ADVOCACY IN THE ESA REGION

The assessment's main purpose was to identify the appropriate advocacy required to improve the coverage of early infant diagnosis (EID) in six countries in the ESA region to find and test those infants and children (aged 0-3 years and 4-9 years) currently not on treatment thereby enabling them to access treatment and reach the countries' national paediatric targets. The study collected data on the extent to which the "Should do" interventions are being implemented.

6. RESULTS

Overall, the ESA region performance improved in EID coverage from 2015-2020 and decreased in 2021 due to the COVID-19 pandemic. However, most countries in the ESA region are believed to be rebounding to the 2019 performance due to measures instituted by developmental partners and host governments. Of the countries reviewed 35% (7/20) had EID coverage of 70% and above by 2020. South Africa had a low performance (69%) in 2016, but it is one country in the southern region that has consistently performed above70% over the past five years and Rwanda in the Eastern region. Eswatini like South Africa have adopted the Nucleic Acid Test recommendations at birth to existing EID testing approaches resulting in many HIV exposed infants (HEI) being reached. In addition, Eswatini has a high proportion of infants who are delivered in health facilities (94.0%), a strong 6-week testing program (87.7% of HEI tested), and the availability of point-of-care platforms at a larger scale than other countries[6]. Contrary to this, Angola the least performing in the region is believed to be due to limited EID services and has nearly 53% home deliveries[7].

From key informant interviews (KII), countries had almost similar reasons on why paediatric HIV testing is lagging behind. These included, limited dedicated paediatric advocacy activities, poor follow-up of breastfeeding mothers, limited integration of Maternal, Neonatal and Child Health (MNCH), HIV and other health related services; inadequate Point of Care (POC) machines and accessories; long turn-around-time (TAT) of EID results etc. Most advocacy activities for paediatric HIV services (community sensitization; outreach campaigns, etc.) were included in the adult protocols and plans resulting in them being clouded by adult activities.

7. POLICY AND OPERATIONAL OPTIONS

- **National scale-up of POCEID testing machines -** This should cover the hard-to-reach areas to complement the conventional laboratories which are already in existence in the easy-to-reach areas. Where the hub and spoke model is being used, digitalizing transmission of results and improving the transport system will reduce the TAT of results. Uganda has been cited[8] as a good example of a country that has developed effective sample referral and result delivery systems using a hub-and-spoke model which resulted in decreased TATs and overhead costs per test from the US $22.22 to $5.
- **Task-shifting -** POCs are essentially simple-to-use machines which can be operated by low-level officers or non-laboratory specialized staff. In some countries (Zimbabwe) key informants indicated that primary counsellors are doing the EID testing using POC machines and specialized staff are assigned more complex activities.
- **Follow-up of breastfeeding mothers -** While guidelines exist to follow-up HEI through the exposure period, these were inconsistently implemented, and most countries have acknowledged that HEIs are sero-converting during this period and being missed.Efforts should be made to frequently track and test infants during breastfeeding until they are weaned.
- **Use of digital systems -** With the advent of health disease emergencies most countries are introducing digital systems and these routine programs can take advantage of them. The COVID 19 response has brought in digital systems to track contacts and monitor them over time, similar approaches can be used to track mother-baby-pairs. In countries where digital systems were used either for data collection or analysis, there were noted advantages such as reduced lost-to-follow-up of clients and improved Lab-clinical interface. This has been helpful in Kenya[9].
- **Public-Private Partnership (PPP) -** Most countries rely on donor funding, and this has resulted in disruption of service provision when donors leave certain geographic areas in the country. Governments should actively participate in the PPP initiatives so that minimum disruptions are encountered when private partners pull out e.g. cartridges for donated POC printers a case on the SAMBA machines in Zimbabwe as was narrated by the key informant.
- **Inclusion of paediatric health services in basic medical training -** Advocacy for improved paediatric health services should be included in all those institutions which train health personnel. Training should include HIV-related services and basic operations of POC machines and interpretation of EID results. This will reduce the capacity-building resource demands of clinicians who would be expected to operate simple machines such as POCs.
- **Integration of MNCH, HIV, and otherhealth-related services -** Maternal, neonatal and child health (MNCH), Expanded Program on Immunization (EPI), and HIV departments should be integrated so that revision of MNCH guidelines will incorporate PMTCT and EID needs. In most countries these departments are separate, and their activities are undertaken in silos. For example, EPI campaigns are sometimes undertaken without HIV services, yet some studies have

noticed that if these services were integrated, there are higher chances of identifying HIV-infected children.Furthermore,thisintegrationwillenhancetheutilizationandstandardization of equipment in an integrated way, for example, the use of TB procured Gen-Xpert machines for EID services.

- **DemandCreation -** Community sensitization on the importance of EID was reported to be limited in all countries interviewed. There is a need to engage the community and the PLHIV so that they can be advocates for services that are being provided. When community members are involved, they will be able to tell personal experiences and guide programming.

8. CONCLUSION

Testing HEI as early as possible, including at birth, is important as it helps with the early initiation of ART which results in reduced HIV morbidity and mortality and should continue to be prioritized. Scaling up POC EID and introducing some of programmatic strategies highlighted above will simplify and significantly improve timely identification, early treatment initiation, reduce loss-to-follow-up and enhance retention.

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