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96.8% of index caregivers accepted to use oral test kit on their children 96.1% would recommend oral test kit to other caregivers 97.6% of caregivers returned results of children's oral screening 97.5% of children with reactive result returned for confirmatory testing 96.9% of parents reported oral test kit easy to use 37.1% HIV-positive yield and 97.7% linked to same-day HIV treatment

Background

- According to 2018 UNAIDS estimates, 26,727 children living with HIV (CLHIV) in Uganda¹ and 31,461 in Zambia² needed antiretroviral therapy (ART).
- ART coverage for CLHIV 0-14 years in Uganda¹ was 68.7% and 59.5% in Zambia.²
- Innovative testing modalities are needed to improve identification of undiagnosed CLHIV.
- Uganda and Zambia evaluated the acceptability, feasibility, and effectiveness of caregiver-assisted oral HIV screening of children 18 months – 14 years.

Methods

- 47 facilities (Uganda-32, Zambia-15) recruited eligible caregivers living with HIV with children who had an unknown HIV status from February-October 2021 to screen them at home using OraQuick Advance© Rapid HIV-1/2 Antibody test kits.
- Children with reactive oral HIVST results received confirmatory testing, per respective national guidelines.
- Confirmed CLHIV linked to ART.
- Acceptability, feasibility and effectiveness were evaluated through study registers documenting testing uptake, results returned, and a caregiver post-use survey.



Results

- Of the 4,059 eligible index parents/caregivers interested in this novel testing option, 3,931 (96.8%) accepted to screen their 7,593 children with oral HIVST kit;
- 7,413 (97.6%) children completed oral HIVST with returned results.
- Among 2,719 caregivers surveyed, 2,636 (96.9%) reported HIVST was easy to use and 2,612 (96.1%) would recommend HIVST to other caregivers.
- 119 (1.6%) children had a reactive HIVST, decreasing the need for facility testing by 98.4%.
- Of these, 116 (97.5%) completed blood-based confirmatory testing.
- 43 (37.1%) children were confirmed HIV-positive and initiated on treatment with 97.7% (42) same-day ART initiations.
- 11 (0.4%) caregivers surveyed reported a child had minor reactions to oral HIVST (e.g., pain, bleeding, itching).

Conclusions

- Caregiver-assisted oral HIVST is an acceptable, feasible and effective option to screen high-risk children who might not otherwise receive HIV testing services and decongest health facilities.
- Policy makers may consider revised guidance to promote caregiver-assisted oral HIV screening for children 18 months-14 years, expanding community-based pediatric testing options during the COVID-19 pandemic.

References:

1] AIDSinfo, 2019. Children (0-14) living with HIV in Uganda in 2017 and Treatment cascade: coverage of people receiving ART – by age in Uganda in 2017. UNAIDS 2018 estimates; Global AIDS Monitoring, 2018. http://aidsinfo.unaids.org/ 2] AIDSinfo, 2019. Children (0-14) living with HIV in Zambia in 2017 and Treatment cascade: coverage of people receiving ART – by age in Zambia in 2017. UNAIDS 2018 estimates; Global AIDS Monitoring, 2018. http://aidsinfo.unaids.org/







