

Assessing 24-Month Treatment Outcomes of Multi-Month Dispensing of Antiretroviral Medications Among Children Living With HIV: A Retrospective Study in Southern Nigeria

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Background

WHO recommends multi-month dispensing (MMD) of antiretrovirals among children living with HIV (CLHIV), however, there is limited data on outcomes of MMD among CLHIV in Sub-Saharan Africa. This study assessed 24-month treatment outcomes of MMD among CLHIV in Southern Nigeria.

Method

This retrospective cohort analysis used data from electronic medical records of CLHIV (5-14 years old) receiving ART as of October 2020 and followed up for 24 months at 153 health facilities supported by PEPFAR/USAID-funded ECEWS ACE-5 project in Akwa Ibom and Cross River States. CLHIV were categorised by age at treatment commencement into 5-9 and 10-14 years; and by ARV dispensing frequency during the period into MMD3 (consistently received 3-months refills), MMD6 (consistently received 6-months refills), mixed-MMD (alternated between 3- and 6-months refills), and no-MMD (received <3-months refills at least once). We compared 24-month outcomes for retention (not late for a refill for up to 28 days) and undetectable (< 50 copies/ml) viral load (VL) among MMD categories using logistic regression.

Results

The study included 1,652 (Males:844, Females:808) CLHIV who received MMD, 51.5% (851) were aged 5-9 years. MMD distribution was 33.6% (n=555) mixed-MMD, 29.5% (n=487) no-MMD, 19.3% (n=319) MMD6, and 17.6% (n=291) MMD3. Overall retention was 95.2% (1572/1652) and 90.3% (1492/1652) at 12 and 24 months respectively, and undetectable VL was 89.1% (1178/1322) among those who had VL tests done at 24 months (1322/1652). CLHIV on mixed-MMD (OR:1.95, 95%CI:1.29-2.95, p<0.01) and MMD6 (OR:3.56, 95%CI:1.93-6.58, p<0.01) were more likely to be retained in care than no-MMD, and those on MMD6 were more likely to have undetectable VL (OR:2.05, 95%CI:1.19-3.53, p=0.01) than other categories.

Conclusion

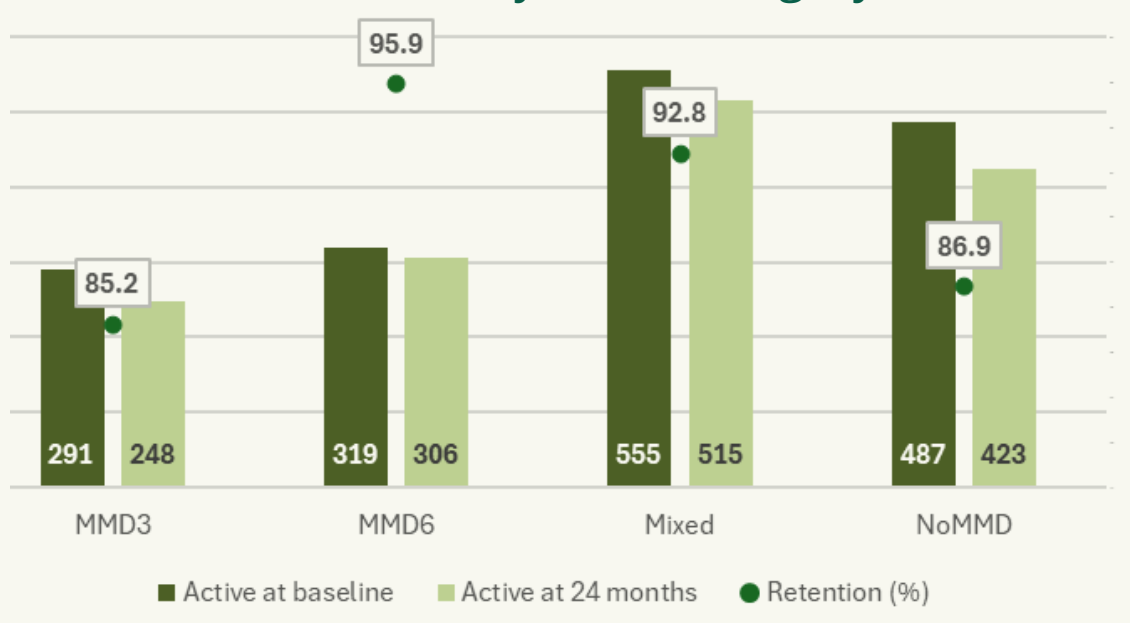
CLHIV had optimal treatment outcomes after 24 months of multi-month ARV dispensing. Programs can consider the systematic scale-up of MMD among CLHIV and evaluate longer-term outcomes.

Children living with HIV (CLHIV) who received over 3 months MMD were more likely to be retained in care and achieve undetectable viral load (VL) compared to those on no-MMD

Acknowledgement

We appreciate healthcare workers and caregivers dedicated to the care of children living with HIV, the ECEWS ACE-5 staff, the host communities, the Government of Nigeria and the Generous support from the American people.

Retention (%) among children living with HIV at 24 months by MMD category



Undetectable Viraemia (%) among children living with HIV at 24 months by MMD category

