

ABSTRACT

To determine HIV-1 subtypes and transmitted HIV-1 drug-resistant mutations among HIV-1-positive children born to HIV-positive mothers in Busia County, blood samples were collected from 53 children aged between 6 weeks and 5 years in 2011. Their mothers were HIV-1 positive and on antiretroviral therapy at the time the children were born. The samples were analyzed for HIV-1 drug resistance and subtypes through sequencing of portions of the HIV-1 *pol* gene. The generated sequences were analyzed for subtype diversity using the REGA and BLAST subtyping tools. HIV-1 drug resistance was determined using the Stanford University HIV database. Of the 53 samples that were successfully amplified and sequenced, 69.8% (37/53) were determined to be HIV-1 subtype A, 22.6% (12/53) were subtype D, 5.6% (3/53) were subtype C, and 1.8% (1/53) were subtype A_{1C}. The prevalence of HIV-1 drug resistance mutations of any kind was 22.6% (12/53).