Title: Exclusive breastfeeding among HIV-positive mothers receiving lifelong ART from PMTCT clinics in Kigali, Rwanda

Track and Category: C104 Reducing post-partum transmission in infants

Authors: Ndayisaba GF¹, Adair LA², Riggle K², Ndatimana D¹, Bobrow EA³, Mugwaneza P⁴, Condo J⁵ Asiimwe A⁶ and the Kabeho Study Team

Affiliations: ¹Elizabeth Glaser Pediatric AIDS Foundation, Rwanda; ²University of North Carolina at Chapel Hill; ³Elizabeth Glaser Pediatric AIDS Foundation, Washington DC; ⁴ Rwanda Ministry of Health; ⁵College of Medicine and Health Sciences, University of Rwanda; ⁶Rwanda University Teaching Hospitals (CHU)

Background: In low-resource countries with unsafe replacement feeding options, HIV-infected women are advised to exclusively breastfeed (EBF) for the first six months while on a regimen of antiretroviral therapy (ART). The Kabeho (Kigali Antiretroviral and Breastfeeding Assessment for the Elimination of HIV) Study is an observational prospective study of 24 month HIV-free survival of infants born to HIV-positive women attending antenatal clinics participating in the Rwanda National Prevention of Mother-To-Child Transmission (PMTCT) program, implementing lifelong ART, ('Option B+'). These analyses evaluated individual and facility factors associated with duration of EBF to 6 months postpartum.

Methods: HIV-positive women from 14 health facilities in Kigali were followed at monthly clinic visits. Self-reported infant feeding practices were recorded at each visit. We estimated longitudinal logistic regression models of EBF including all observations up to 6.5 months of age (n=3295 observations, 590 infants surviving>2 days). We considered individual and facility-level factors.

Results: Overall, 97.6% of mothers initiated breastfeeding; however, EBF declined rapidly after first 3 months postpartum. By 6.5 months, less than half (43%) of infants were exclusively breastfed (Figure 1). Likelihood of EBF was significantly lower among women with higher education, living in households with higher socioeconomic status, and with a twin or cesarean delivery. A higher facility factor score (more staff training related to infant feeding) and provision of infant feeding counseling were strongly associated higher likelihood of EBF across all ages.

Conclusions: Results show that adherence to 6 months of EBF rapidly declined after 3 months postpartum in Kabeho mothers. Given the strong association of facility factors with EBF, Option B+ programs should focus on improving infant feeding counseling at facilities by staff well-trained in comprehensive infant feeding and support.

Figure 1: Prevalence of any and exclusive breastfeeding among Kabeho infants.

Prevalence of Any and Exclusive Breastfeeding among Kabeho Infants

