

Exclusive Breastfeeding Is More Common Among HIV-Infected Than HIV-Uninfected Kenyan Mothers at 6 Weeks and 6 Months Postpartum.(2017)

Shadrack Oiyie<sup>1</sup>, Walter Mwanda<sup>1</sup>, Mary Mugambi<sup>2\*</sup>, Suzanne Filteau<sup>1</sup>, and Victor Owino<sup>2</sup>

<sup>1</sup> University of Nairobi Institute of Tropical and Infectious Diseases Nairobi,  
**2 \*Department of Human Nutrition and Dietetics, Technical University of Kenya, Nairobi, Kenya .3 London School of Hygiene and Tropical Medicine , London, United Kingdom**→

**Abstract**

**OBJECTIVE:** To compare breastfeeding practices determined by mothers' own recall versus a stable isotope technique (deuterium oxide dilution) among human immunodeficiency virus (HIV)-infected and HIV-uninfected mothers at 6 weeks and 6 months postpartum.

**METHODS:** Exclusive breastfeeding (EBF) rates were assessed cross-sectionally at 6 weeks and 6 months postpartum among 75 HIV-positive and 68 HIV-negative women attending postnatal care. EBF was derived from maternal 24-hour recall of foods that were fed to the infant and by objective measurement of nonhuman milk-water intake using deuterium oxide (DO) dilution technique.

**RESULTS:** Multivariable logistic analyses were adjusted for infant sex, gravidity, maternal age, marital status, and maternal education. Using recall method, a greater proportion of HIV-infected mothers exclusively breastfed than HIV-uninfected mothers both at 6 weeks postpartum [94.1% versus 76.9%, respectively (adjusted odds ratio [aOR] 7.81; 95% confidence interval [CI] 1.9-31.6,  $p = 0.004$ )] and at 6 months postpartum [75% versus 59.7%, respectively (aOR 2.27; 95% CI 1.0-5.3,  $p = 0.058$ )]. At 6 weeks postpartum EBF rates from the DO technique were 23.5% and 13.8% for HIV-positive and HIV-negative mothers, respectively (aOR 0.35; 95% CI 0.11-1.04,  $p = 0.059$ ). At 6 months postpartum, the DO technique determined EBF rates were 43.3% among HIV-positive and 24.2% among HIV-negative mothers, respectively (aOR 2.4; 95% CI 1.0-5.7,  $p = 0.048$ ).

**CONCLUSIONS:** HIV-infected mothers are more likely to exclusively breastfeed compared with HIV-uninfected mothers. In this resource-poor setting, maternal recall overestimates EBF rates as compared with the deuterium oxide dilution technique. Validating EBF recall data using the objective DO technique is highly recommended for accurate tracking toward global targets on breastfeeding practices.

