

# Maximizing HIV-Free Survival for Children in Kigali, Rwanda



## Could national and global goals for HIV-free child survival be achieved by providing HIV-positive pregnant women with lifelong antiretroviral therapy (Option B+) and infant and young child feeding counseling?

### STILL A CRITICAL PROBLEM

Enormous strides have been made in the prevention of mother-to-child transmission (PMTCT) of HIV as a result of increased access to antiretroviral treatment (ART) for pregnant and postpartum women living with HIV and their infants. Yet too many babies, particularly in high HIV-burden countries, continue to become infected through pregnancy, labor and delivery and breastfeeding.



We've made significant global progress but still have a way to go.



**2000**

~1,300 children became infected with HIV every day.



**2015**

~400 children became infected with HIV every day.

Source: UNAIDS 2015

### SPOTLIGHT ON RWANDA

- In 2013, HIV prevalence among women in Kigali, the study site, was more than double the prevalence of women nationally (7.4% vs. 3.5%).\*
- This translates to thousands of infants being exposed to HIV each year.
- In 2012, the government of Rwanda implemented:
  - Option B+: All HIV-positive pregnant women are initiated on lifelong ART. Rwanda was an early adopter of the regimen nationwide.
  - Infant and young child feeding (IYCF) counseling and support for HIV-positive women provided through the PMTCT program.

### THE KABEHO STUDY

“Kabeho” in Kinyarwanda means “to wish someone a long life.”

This was one of the first studies to assess the implementation of Option B+ as a national program and PMTCT outcomes:

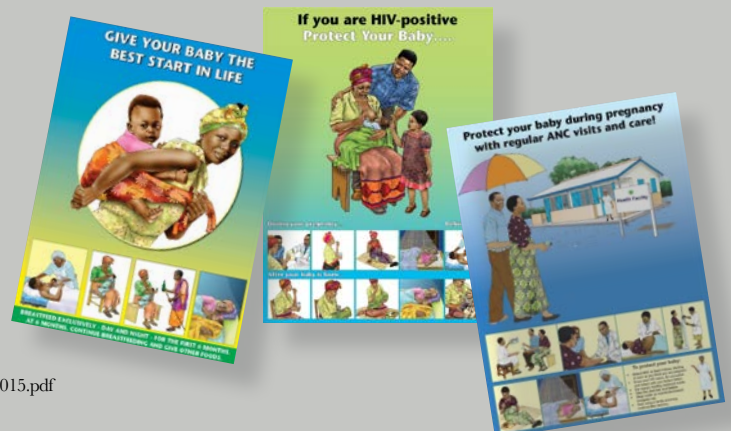
- In a real world setting;
- Among a breastfeeding population; and
- Over a period of 2 years after delivery.

608 HIV-positive women being followed in the national program were enrolled in the study. These women, who were in their third trimester of pregnancy or up to 2 weeks postpartum, and their infants were followed up to 24 months after delivery.

Most women were:

- In their mid-20s to mid-30s;
- Married or co-habiting;
- Educated up to primary school; and
- Low income.

All study participants received PMTCT services in 14 health facilities in Kigali, which included initiation and support of lifelong ART and IYCF counseling and support.

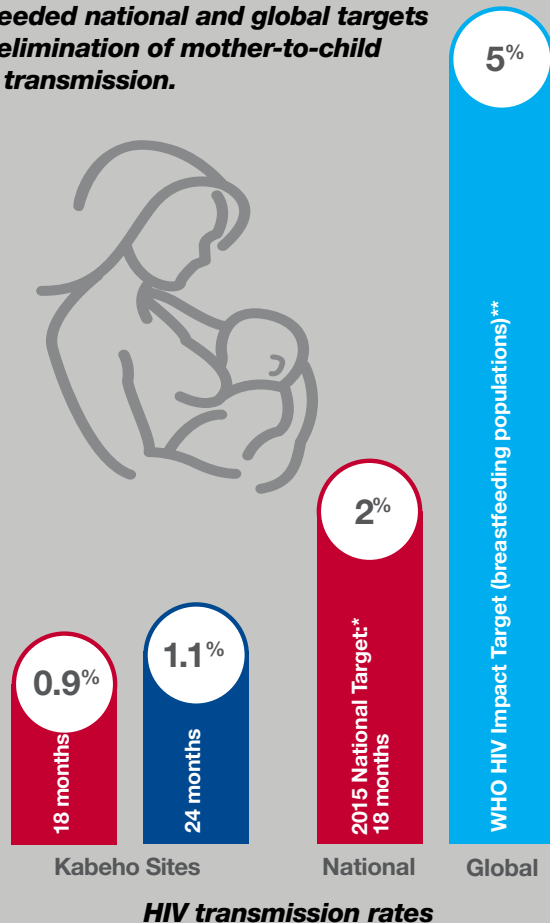


\*Ministry of Health and Rwanda Biomedical Center 2013

[http://www.moh.gov.rw/fileadmin/templates/Narrative\\_Report/RAIHIS\\_Key\\_Findings\\_July\\_2015.pdf](http://www.moh.gov.rw/fileadmin/templates/Narrative_Report/RAIHIS_Key_Findings_July_2015.pdf)

## KIGALI'S PMTCT PROGRAM: On Track for Eliminating Pediatric HIV Infection

**Kabeho study health facilities exceeded national and global targets for elimination of mother-to-child HIV transmission.**



### Adherence to exclusive breastfeeding at 5 to 6 months postpartum was most strongly related to:

- Women's attendance at a facility where the health workers received training in IYCF counseling; and
- Women's receipt of counseling from a trained health worker.

**Overall, women's attendance in the PMTCT program and their adherence to treatment was high. Certain groups of women had low retention and adherence, such as:**

- Younger women (25 years or under) who learned their HIV status with this pregnancy;
- Less educated women; and
- Women who have been on ART for long periods.

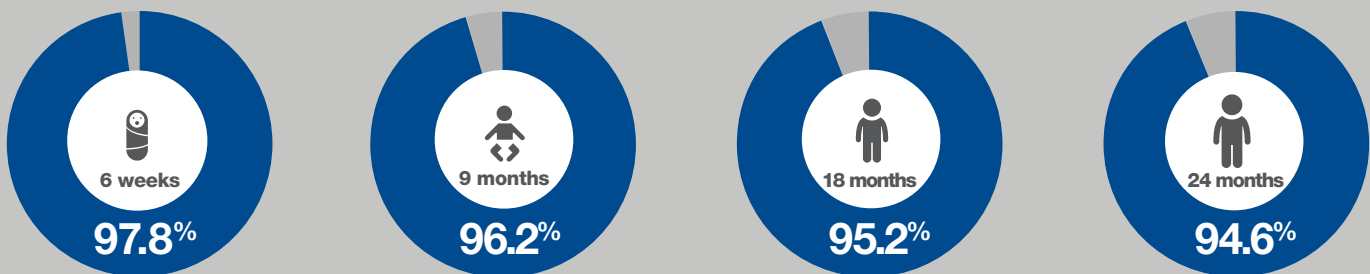
## EVIDENCE TO ACTION

The Kigali Option B+ PMTCT program demonstrated that it is possible to achieve mother-to-child HIV transmission rates similar to those in high-income, non-breastfeeding populations. It is also possible to achieve high ART adherence and positive treatment outcomes among both infants and mothers.

Going forward, the evidence from this study indicates that PMTCT program managers and policymakers should:

- Pay special attention to specific groups of women – newly diagnosed, less educated and on ART for several years – to improve their retention in care and ART adherence; and
- Ensure relevant health workers in every facility are trained in IYCF and routinely provide counseling to mothers to foster exclusive and extended breastfeeding, as with uninfected mothers, as long as they adhere to ART.

### A very high proportion of infants remained HIV-free and alive at 2 years of age.



\*Ministry of Health and Rwanda Biomedical Center 2013 [http://www.moh.gov.rw/fileadmin/templates/Narative\\_Report/RAIHIS\\_Key\\_Findings\\_July\\_2015.pdf](http://www.moh.gov.rw/fileadmin/templates/Narative_Report/RAIHIS_Key_Findings_July_2015.pdf)

\*\*UNAIDS 2016 [http://www.unaids.org/sites/default/files/media\\_asset/GlobalPlan2016\\_en.pdf](http://www.unaids.org/sites/default/files/media_asset/GlobalPlan2016_en.pdf)



Elizabeth Glaser  
Pediatric AIDS  
Foundation  
*Until no  
child has  
AIDS.*



The implementation research project, *The Kabeho Study: Kigali Antiretroviral and Breastfeeding Assessment for the Elimination of HIV* (AID-OAA-12-00024), was funded by the United States Agency for International Development (USAID) under the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). This assistance is from the American people. The views expressed in this publication do not necessarily reflect the views of the United States Government. The research was carried out by the Elizabeth Glaser Pediatric AIDS Foundation, Rwanda Biomedical Center and the University of Rwanda in collaboration with the Government of Rwanda.

Published in February 2017.

Suggested citation: Elizabeth Glaser Pediatric AIDS Foundation, Government of Rwanda, USAID and Project SOAR. 2017. "Maximizing HIV-free survival for children in Kigali, Rwanda." Washington, DC: USAID.