

## THE Growth of children exposed to HIV during the first year of life in Burundi

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### **Introduction:**

Although there is consistent evidence of stunting in children with HIV infection; to the best of our knowledge, any studies on the growth of children exposed to HIV have been conducted in Burundi.

### **Objectives:**

The main objective of this work is to evaluate the growth of children exposed to HIV during the first year of life and as a secondary objective to identify the negative predictive factors of growth.

### **Methods:**

Our study is a retrospective, descriptive and analytical study conducted at the Public health center of Buyenzi.

### **Results:**

A total of 72 infants followed all over a one-year period (from October 2012 to September 2013) and followed the PMTCT program until the age of 18 months with regular monitoring of their anthropometric parameters (weight and height ) at ages 3, 6, 9 and 12 months were included in this study. Underweight varies from 27.8 to 31.9% between 3 and 12 months with a peak frequency at the age of 3 months. Severe underweight ranges from 8.3 to 12.5% with a peak of frequency at 6 months of age.

Stunting ranges from 31.9 to 37.5%; the severe form varies from 8.3 to 19.4%. Acute malnutrition ranges from 9.7 to 19.4% while it varies from 4.2 to 1.4% in its severe form. The velocity of growth rate ranged from 15 to 32 cm with an average of 22 cm in the first year for an average of 25 cm in the normal child.

The risk factors associated with malnutrition are maternal age below 35 years, maternal nutritional status, low maternal education, prematurity and low birth weight.

### **Conclusion:**

Chronic malnutrition reflected in our study by underweight and acute malnutrition in children remains a public health problem in general and in children born to positive HIV mothers in particular.

**Key words:** Exposed children – HIV infection - growth - First year of life