



Anemia Control Programs and Decreasing Anemia Prevalence in Rwanda

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Background and Objectives:

In Rwanda between 2007/8 and 2010, anemia decreased from 29% to 20% in pregnant women and 48% to 38% in children 6-59 months. To better understand why anemia prevalence has decreased, we reviewed the change in program coverage.

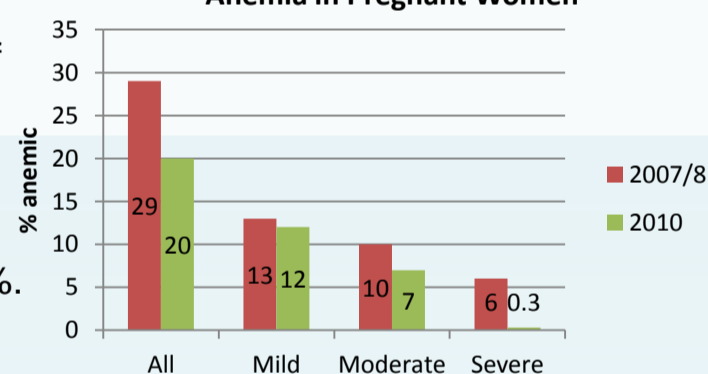
Methods:

The 2007/8 and 2010 Rwanda Demographic and Health Surveys were used to determine the change in anemia in both pregnant women and children 6-59 months and changing coverage of iron intake, malaria control, deworming, and other related programs.

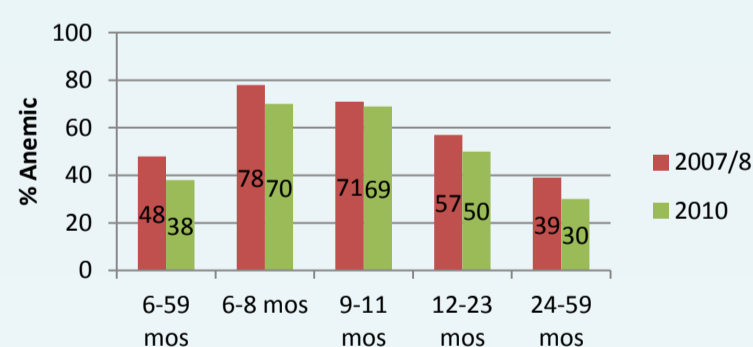
Results:

- Women consuming any iron-folic acid supplements (IFAS) increased from 41% to 73% (however, most women were receiving <60 IFAS and only 3% of women received ≥60 IFAS in 2010).
- Deworming in pregnancy increased from 18% to 39%.
- Sleeping under long-lasting insecticidal nets (LLINs) increased from 60% to 72% in pregnant women and from 56% to 70% in children.
- The proportion of children sleeping under LLINs increased from 56% to 70%.
- The deworming of children increased from 70% to 86% with only 31% coverage in younger children group compared to over 90% in older children.
- Only 1-2% of women and children tested positive for malaria in both surveys.
- Anemia in pregnant women decreased : overall, anemia decreased by 31% with; moderate anemia by 33% and severe anemia by 93%.
- Anemia prevalence in children 6-59 months diminished by 26% (most of the decline occurred in children 24-59 months compared with children 6-23 months).
- Most of the decline in children took place for severe anemia in both age groups.

Trends in All, Mild, Moderate and Severe Anemia in Pregnant Women



Trends of Anemia in Rwandan Children 6-59 Months 2007/8-2010



Conclusions:

The decline in anemia in Rwanda was probably due to multiple interventions. The availability and quality of health services have improved in the country. Stunting and wasting in children also has decreased. Anemia-specific interventions increased in coverage, particularly for LLINs for both women and children and deworming in children. Anemia prevalence decreased the most when children received these interventions. IFA supplementation also increased during the period but coverage has not reached the World Health Organization recommendation of 180 IFA supplements in pregnancy. A preliminary secondary analysis of the 2010 RDHS found that anemia decreased as the number of IFA supplements increased. For the few women who took >90 IFA supplements, none were anemic. This analysis shows that anemia prevalence can be decreased by increasing the coverage of anemia control programs. While there is still work ahead to increase the coverage of iron intake, both in food and supplements, and expand helminths and malaria control, Rwanda has made promising strides to expand coverage of programs which has resulted in impressive decreases in anemia in women and children.

Keywords:

Anemia, malaria, deworming, iron supplementation