

PERSISTING HIGH LEVEL OF CHILD MALNUTRITION ASSOCIATED WITH ANEMIA BUT LOW MALARIA INFECTION IN A RURAL COMMUNITY OF THE SOUTH-KIVU PROVINCE, IN THE EASTERN PART OF THE D.R.CONGO.

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Background

A follow up of the prevalence of child malnutrition in a population is necessary to assess the effect of public health interventions and of other measures to improve the living conditions, or to evaluate the aggravating effect of socio-economic and political instabilities such as war conflicts.

Aim

This survey was conducted to **assess the prevalence of child malnutrition and its association with other nutrient deficiencies or with malaria** in a rural population in a post conflict context.

Methods

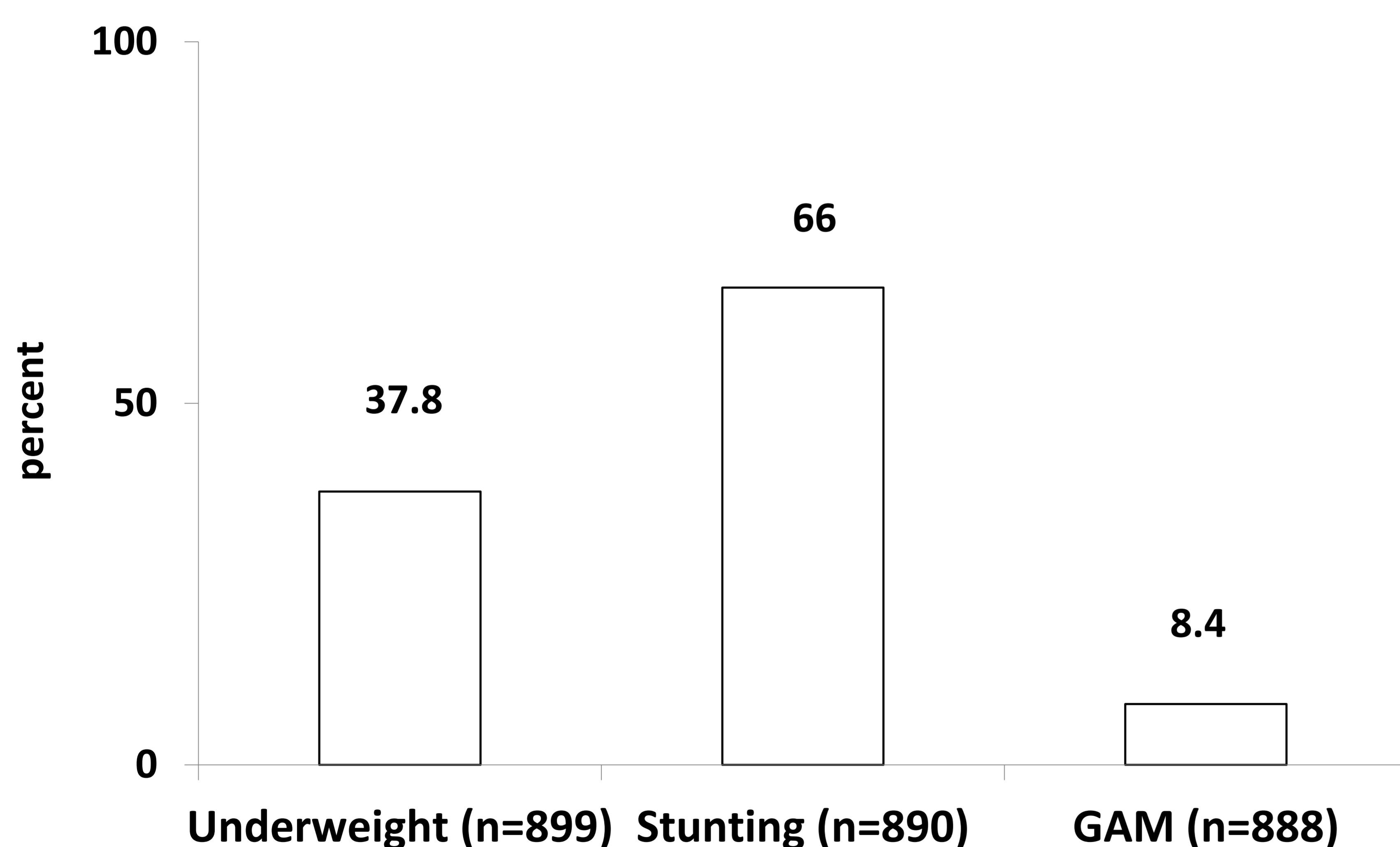
Population:

- 900 children; randomly selected in a Miti-Murhesa rural health zone.

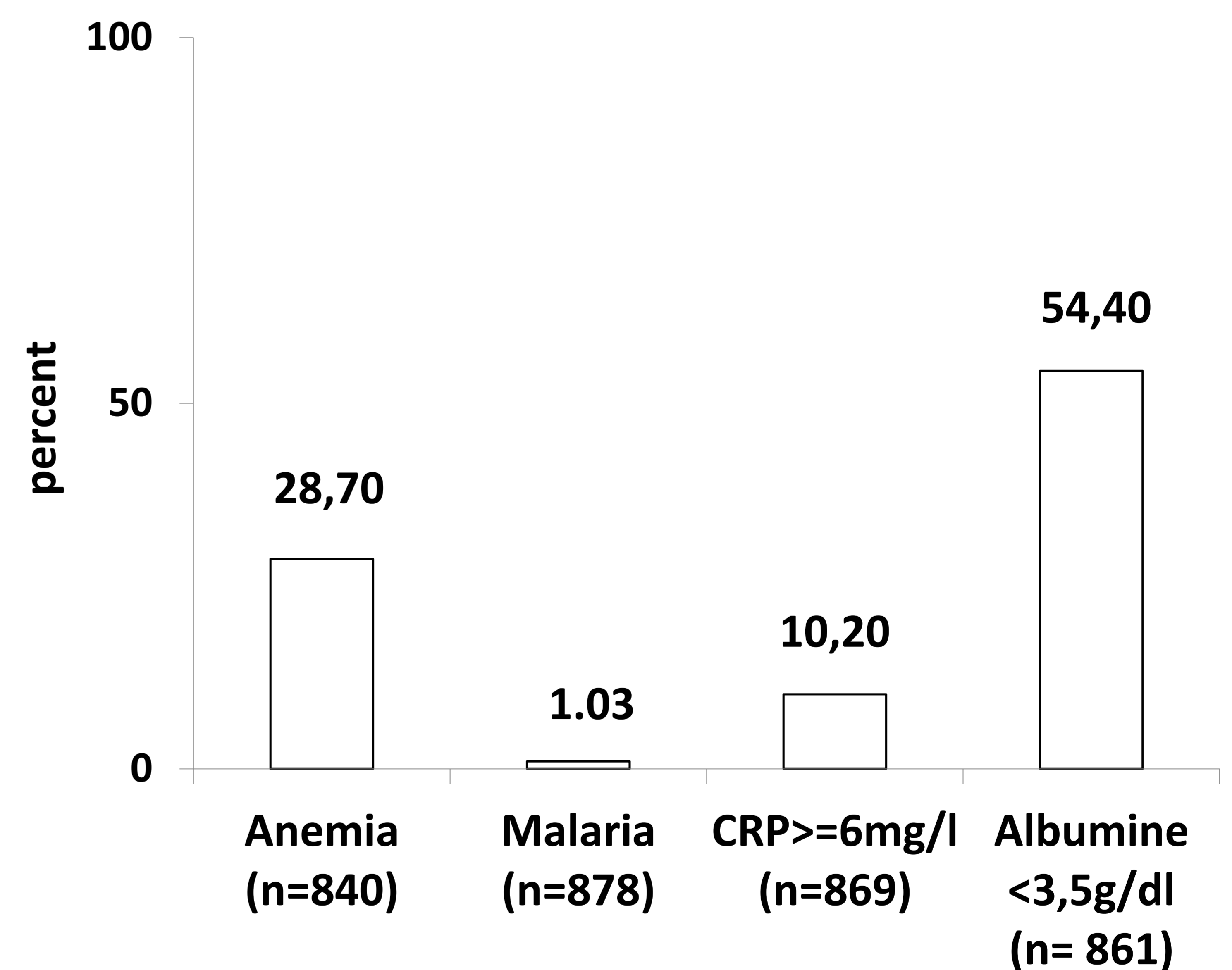
Parameters:

- **Physical/clinical:** underweight, stunting and acute malnutrition defined as Z-scores of <-2 for weight for age, height for age, and weight for height, respectively; acute malnutrition also by the presence of bilateral pitting edema
- blood samples for **chemical analysis** (anemia defined as hemoglobin concentration <11 g/dl)
- **blood thick smear** for the detection of malaria parasites

Results



GAM : global acute malnutrition



CRP: C-Reactive Protein

Conclusions

This study documents that malnutrition remains highly prevalent in the rural context in the South-Kivu province and suggest that the condition is associated with anemia probably caused by iron deficiency. In our study, malaria is not associated with anemia as also proposed by previous studies.