



Correlates of child nutritional status in six African countries

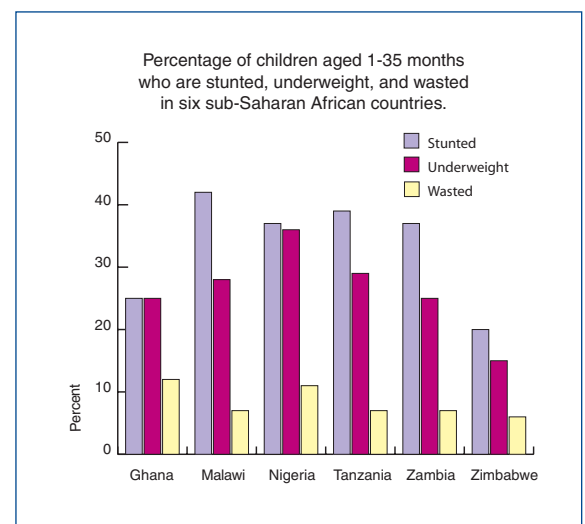
Background

According to estimates by the United Nations Children's Fund, nearly one third of all sub-Saharan African children under the age of five years are under-weight. This is a cause for concern as there is evidence that the risk of mortality is elevated even for children who are mildly to moderately under-weight. Under-nutrition may arise from such causes as inadequate dietary intake and illness that are often interrelated to form a repeated cycle that can have fatal consequences. The intermediate causes of under-nutrition include inadequate access to food, poor sanitation, insufficient health care and inadequate childcare.

Methods

The study used a total of 14,658 records of children from six countries, namely: Ghana, Malawi, Nigeria, Tanzania, Zambia and Zimbabwe. Z-scores were obtained by comparing anthropometric measurements with distributions of international World Health Organisation reference populations. A child was regarded as underweight if his or her weight-for-age z-score was lower than two standard deviations from the reference median. For stunting and wasting height-for-age and weight-for-height were used as indicators respectively. The analysis aimed to identify the correlates of nutritional status in

these countries and at the same time, control for potential correlation of poor nutritional status among siblings and communities.



Findings

- With the exception of Zimbabwe, more than a quarter of all children aged 1-35 months were stunted. Similarly, the proportions of children who were underweight were high, ranging from 16% in Zimbabwe to 36% in Nigeria. Levels of wasting were highest in the two west African countries.

Findings

- On average the children were born of adequate weight for their ages and heights but that their nutritional status deteriorated rapidly soon after birth. Female babies were, on average, better nourished than male children, especially among those aged between 4-35 months.
- Morbidity within two weeks of the survey is associated with under-weight. Those who had diarrhoea had significantly lower weights for their ages and sex compared to those who had not been ill.
- Exclusive breastfeeding is uncommon: the average percentage of children under the age of four months who were being exclusively breastfed ranged from 1% in Nigeria to about 33% in Tanzania.
- Children who were being breastfed beyond their first birthday were, on average, of poorer nutritional status compared to those who had stopped breastfeeding. This result might reflect the practice of African mothers prolonging breastfeeding of children who appear frail. Another explanation may be poor complementary feeding among older children who are being breastfed compared to those who have been weaned.
- Some families are more likely to have malnourished children than other families with comparable socio-economic circumstances. This may be as a result of differences in feeding practices and childcare. Similarly, children in a community have similar nutritional status compared to those of a different community, other things being equal.

Policy Implications

- Parents should be encouraged to seek medical advice promptly when young children are ill. In particular, the use of oral rehydration therapy for children with diarrhoea should be emphasised to prevent rapid weight loss.
- Appropriate feeding practice should be encouraged. In particular, balanced complementary food for older children should be stressed as well as exclusive breastfeeding for infants under the age of four months.
- The strong correlation of nutritional status within families suggests intervention programmes should focus not only on individual, malnourished children, but also on their families and communities.

Full reference: Madise, N.J., Matthews, Z. and Margetts, B. 1999. Heterogeneity of child nutritional status between households: A comparison of six sub-Saharan African countries. *Population Studies* 53:331 -561.

For more details or to receive a copy of this report, please contact: Rosemary Lawrence, Opportunities and Choices, Department of Social Statistics, University of Southampton, Southampton, SO17 1BJ, UK. Tel: +44 (0)23 8059 5763 Fax: +44 (0)23 8059 3846; Email: rl@socsci.soton.ac.uk