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Nutritional status, dietary diversity and morbidity among infants and children aged 6-23 months in rural Western Kenya



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INTRODUCTION

Sub-optimal infant feeding practices, frequent infections and micronutrient deficiencies are major contributors to the high incidence of malnutrition among young children in Africa¹. Complementary foods fed to children lack variety and are low in energy and nutrient density. Poor nutrition during the complementary feeding period is associated with increased growth faltering, morbidity, delayed motor and mental development and mortality². This study aimed to assess the caregivers' feeding practices and its influence on the children's dietary diversity and nutritional status.

- The diets of the children were dominated by staples and low in animal source foods, fruits and vegetables, Figure 2.
- Less than 50% of the children received a minimum acceptable diet (MAD), Table 2.
- About 68% of the children were reported to have been sick during the previous 2 weeks. Common illnesses reported among the children are presented in Figure 3.
- During sickness 71%, 82% and 77% of the caregivers breastfed, gave fluids and solid foods to their children less often than usual.

METHODOLOGY

- A cross-sectional baseline survey was conducted in July/August 2012 in Teso South and Bondo sub-counties, Western Kenya.
- Two-stage cluster sampling was applied in selecting the sample:
 - > 30 villages were selected proportional to population size.
 - Households with infants and children aged 6-23 months and their caregivers were randomly selected from each village.
- Semi-structured questionnaires were used to assess household sociodemographic characteristics, child feeding practices and morbidity patterns.
- Children's Dietary Diversity Scores (CDDS) were calculated based on 7 food groups³ using data from one 24 hour recall.
- Anthropometric measurements of the children were taken and Heightfor-age (HAZ), weight-for-age (WAZ) and weight-for-height (WHZ) Z-scores calculated.
- ✤ Infant and young child feeding practices were assessed following the WHO indicator quidelines⁴

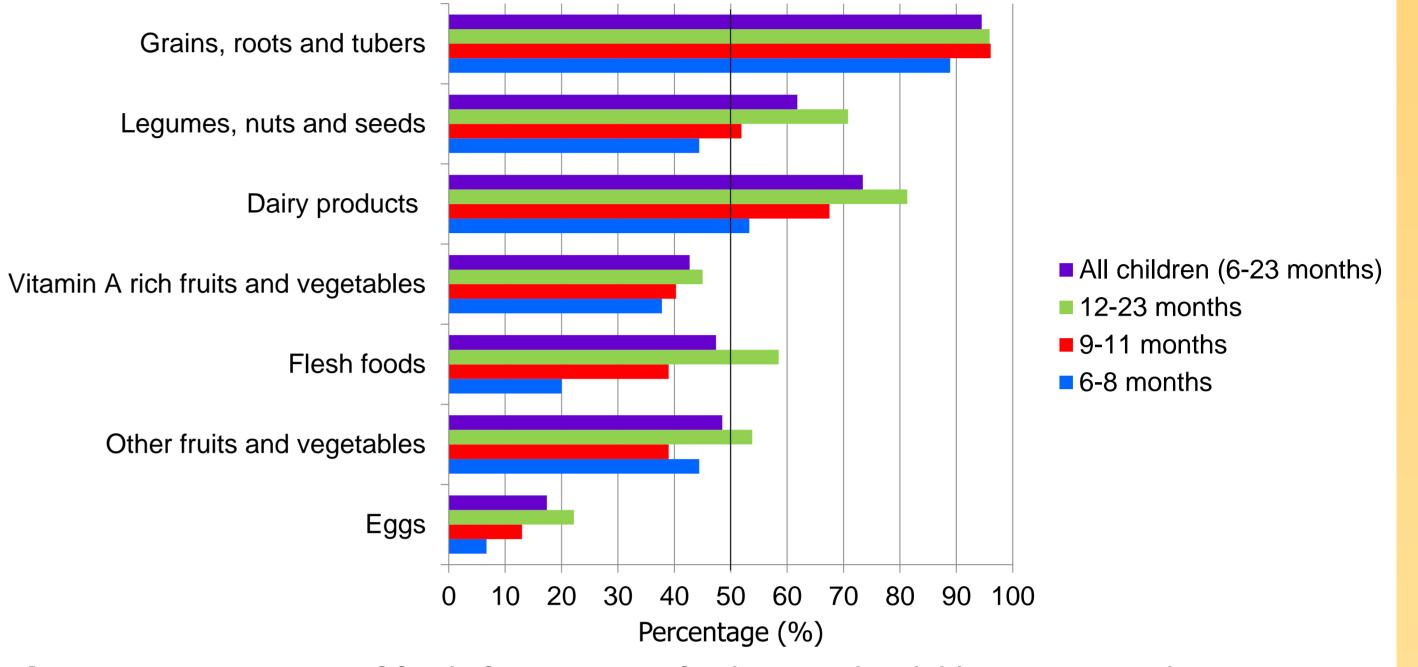


Figure 2: Consumption of foods from various food groups by children 6-23 months

Table	 Prevalence of children receiving age appropropriate months); n=293 	priate complementary food (children 6-23
IYCF	Indicator	Percentage (%)
Minin	num dietary diversity (MDD)	55.3
Minin	num meal frequency (MMF)	68.4
Minin	num acceptable diet (MAD)	47.5

MDD: proportion of children 6-23 months who receive foods from \geq 4 food groups per day. MMF: proportion of children who received food the minimum number of times or more (\geq 3 times

WHO indicator guidelines⁴.

RESULTS

Data was collected from 293 caregivers with infants and children aged 6-23 months. Selected characteristics of study participants are presented in Table 1.

Table 1: Selected characteristics of study participants		
Variables (n=293)	Mean±SD, %	
Age of children in months (mean±SD)	14.2±4.9	
Age of caregivers in years (mean±SD)	25.8±6.4	
Household size (mean±SD)	6.0±2.5	
Main occupation of household		
Small businesses/Petty trade	31.4%	
Crop and animal farming	18.8%	
Main caregiver mother	97.3%	
Education level of caregivers		
Some primary education	46.8%	
Completed primary education	30.4%	

Stunting was common among the sample in the study area with 29.3% of the children being stunted (including 10.2% who were severely stunted), Figure 1.

for breastfed and ≥ 4 times for the non-breastfed).

MAD: proportion of children 6-23 months who received the recommended dietary diversity and meal frequency⁴.

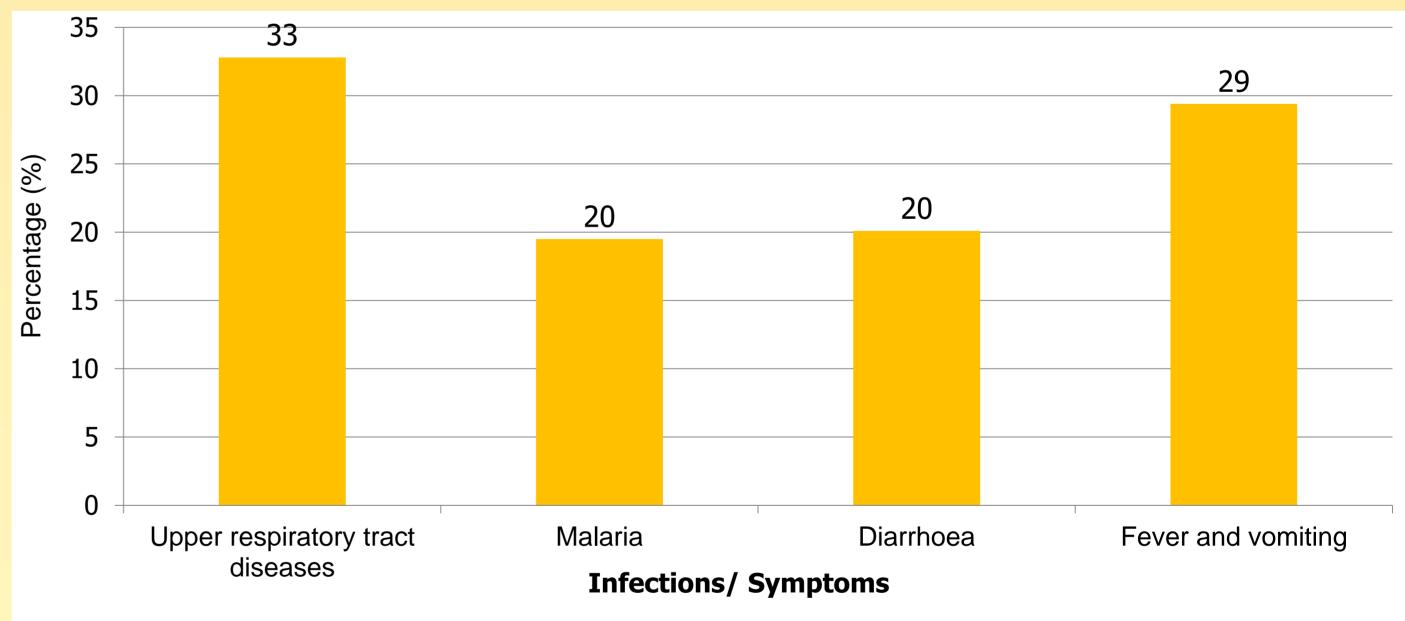


Figure 3: Common illnesses reported among children 6-23 months in the past 2 weeks

No significant associations were found between stunting, dietary diversity and morbidity.

CONCLUSION

✓ Chronic undernutrition, low dietary diversity and a high burden of morbidity were characteristic among the children in the study area.

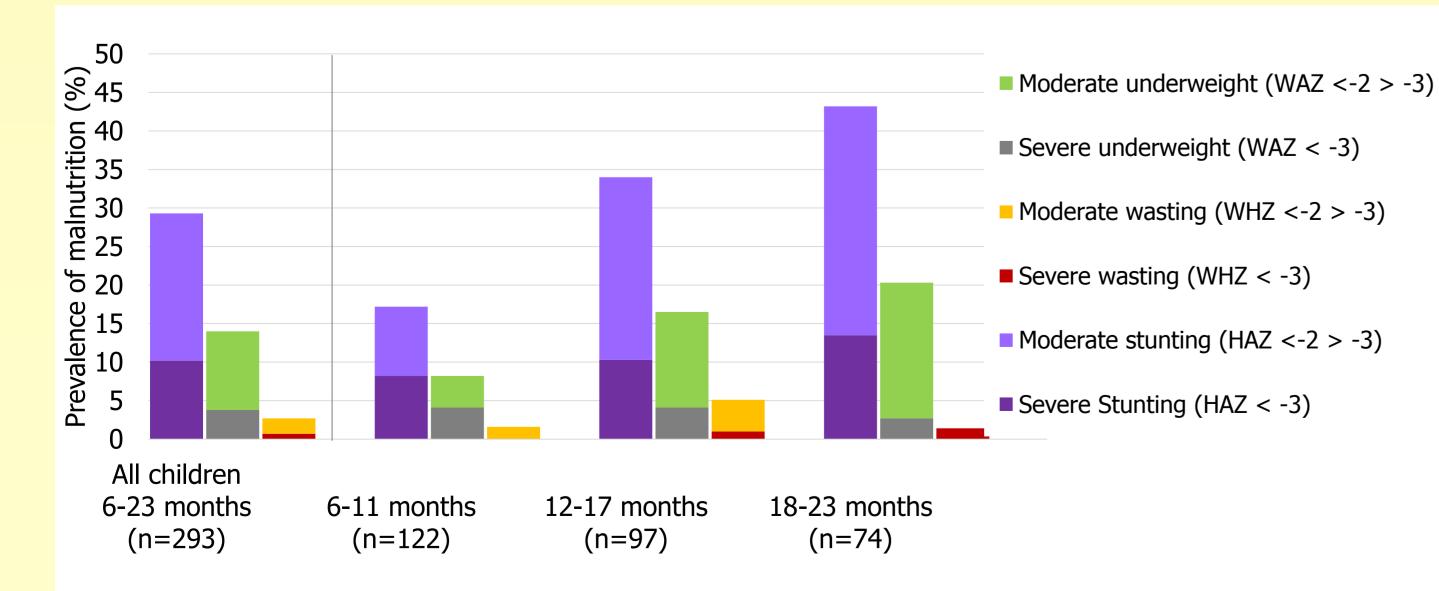


Figure 1: Prevalence of stunting, underweight and wasting among children 6-23 months

- ✓ These could be attributed to poor feeding practices, low levels of education among the caregivers and lack of accessibility to a variety of nutrient rich foods.
- ✓ Approaches to increase access to and utilization of variety of foods and that can be followed by household are needed.

References:

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