HOUSEHOLDS' FOOD ACCESS AND THE NUTRITIONAL STATUS OF CHILDREN AGED 6 - 24 MONTHS IN LILONGWE RURAL - MALAWI

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ABSTRACT

In 2005, Malawi introduced farm input subsidy programme to enable smallholder farmers afford farm inputs and improve households' food access. At national level, reports of programme success indicate trebled food production. Lack of data on the programme effect at household level in rural communities led to an assessment of households' food access and nutritional status of children.

The main objective was to assess households' food access and the nutritional status of children aged 6 - 24 months.

The study was cross-sectional, conducted in Lilongwe rural. Lilongwe is the capital city. Large portion of its population lives in rural areas engaged in subsistence farming.

Data from 330 questionnaires were collected. Five Traditional Authorities, 70 villages and children aged 6-24 months were randomly sampled. Households' food access was determined basing on the proxy measures of household food insecurity scale range 1 to 9, months of inadequate household food provisioning range 1 to 12 and, household dietary diversity range 1 to 12. Adequacy of nutrient intake was assessed using 24 hour recall and determined prevalence of inadequate intake for macro and micro-nutrients. Under-nutrition was determined by anthropometric measurements of height, weight and mid upper arm circumference. WHO Anthro soft-ware was used to determine z scores for stunting, wasting and underweight with a z score of < -2 considered to be an indicator of under-nutrition. SPSS and Epi Info Statistical Packages were used to analyse data. T-tests were used to compare nutrient intake with RDAs and daily mean nutrient intake among children. Chi square tests and logistic regression models were used to identify factors associated with under-nutrition.

The mean ($\pm$ SD) maternal and child age was 32 ± 8.8 and 16 ± 8.2 respectively. About 29.1% of the households were food secure while 47.8% were severely food insecure. About 70.9% households were food insecure five months prior to the next harvest. 12.2% of the households consumed diverse diet. About 97% of children aged 7 to 12 months were not able to meet estimated average requirement of Zinc and iron while those aged 13 to 24 months were not able to meet their estimated average requirement of proteins, folate, zinc, and iron (71.3%, 92.4%, 100% and 98.25% respectively). 50% of the children were stunted, 31.8% were wasted while 18.2% were underweight. About 50% of households with stunted children, 24.8% were severely food insecure. Controlling for energy and proteins, dietary diversity scores were significantly correlated with stunting and underweight (p=0.022 and 0.014; 0.019 and 0.013 respectively) and not wasting. Logistic regression models indicated that an increase in age of the child reduces the chances of being underweight by 19.07% (OR: 0.803 95% CI 0.693 – 0.931). Falling sick 30 days prior to the study was significantly associated with wasting (p = 0.006). Those who did not fall sick had 88% lower chance of being wasted (OR: 0.220, 95%, CI: 0.075 - 0.647).

Under-nutrition was high in Lilongwe rural. Surplus food at national level didn't improve households' food access. Households were food insecure five months prior to the next harvest. Inadequate households' food access was significantly associated with under-nutrition. Communities need to practice food diversification for both home use and sale. Food production programmes should target months of critical food shortage.