PREVALENCE AND FACTORS ASSOCIATED WITH UNDERNUTRITION IN CHILDREN AGED 2 – 5 YEARS LIVING IN PASTORAL AND FARMING COMMUNITIES OF WEST POKOT, KENYA

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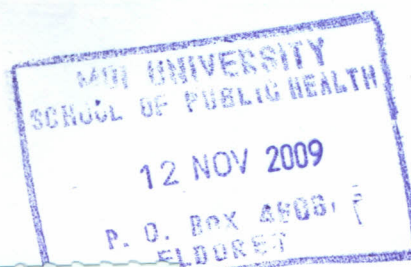
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ABSTRACT

Introduction

In developing countries, undernutrition is a public health concern often as a result of protein energy malnutrition.

Problem statement

Malnutrition and low intake of vitamin A rich foods among children is a major concern in developing countries particularly in Sub Saharan Africa, Kenya included. Inadequate dietary intake and illnesses tend to create a vicious cycle of malnutrition and disease. In order to break this cycle, there is need to ensure that the nutritional status and intake of vitamin A rich foods of the pre - school is safeguarded.

Objectives

The specific objectives of the study were to; determine the nutritional status, assess dietary and intake of vitamin A rich foods, establish factors that contribute to malnutrition and symptoms of disease among the pastoral and farming pre – school children of West Pokot.

Study design

The study was designed to assess the nutritional status of children aged 2 - 5 years in pastoral and farming communities of West Pokot. Cross sectional comparative design was applied. Three hundred and thirty eight (338) children with equal numbers from Kapenguria and Kongelai divisions were selected using simple random and multi stage sampling techniques. Data was collected using interviewer administered questionnaires. Anthropometric measurements of weight, height and MUAC were taken. In addition, data on dietary and intake of vitamin A rich foods was collected. Data analysis was done using frequencies, means and cross tabulations. Statistical significance was tested using Chi- square tests, T – tests and binary logistic regression. Dietary and intake of vitamin A rich foods was calculated using HKI Food Frequency Questionnaire and Food Composition Tables.

Findings

Stunting affected 34.3% and 19.5% children in farming and pastoral communities, respectively. Underweight was 40.2% and 39.6% in the pastoral and farming communities, respectively while wasting was about 31% in both communities. Majority (>90%) of children in both communities consumed adequate protein and calcium while energy and Zinc were averagely (>50%) consumed. Dark green leafy vegetables and milk cream were the major plant and animal sources of vitamin A. All the respondents in pastoral and 78.1% in farming communities were food insecure. There was a significant difference in stunting (p = 0.002) and underweight (p = 0.001) in pastoral and farming communities while wasting (0.342) was insignificant. Fever was the major symptom of disease in pastoral and farming children. Half (50.1%) of the children in pastoral community and 23.1% in farming community had not been immunized against measles. Fitting a logistic regression model, the months the households experienced food shortage was a strong predictor of malnutrition in pastoral (underweight OR = 0.318, P = 0.004; wasting OR = 0.974, P 0.005) and farming (underweight OR = 0.095, P = 0.018; wasting OR = 0.194, P = 0.002) pre – school children of West Pokot District.

Conclusions and recommendations

In conclusion, the level of malnutrition in these communities was high and intake of vitamin A rich foods was low. Several factors contributing to this were months of food scarcity, the sources of water and the caregiver of the child. It is therefore recommended that food security and nutrition education to the community be addressed by relevant governmental ministries and other stakeholders.