Risk Factors in Childhood Malnutrition among Children Aged 6 to 59 Months in Makuyu Division, Maragua District, Kenya

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A descriptive cross-sectional study aimed at assessing the risk factors of childhood malnutrition in Makuyu division of Maragua District was carried out between the months of December 2002 and April 2003. The survey sought to establish the prevalence of childhood malnutrition among children aged 6-59 months and explore the risk factors associated with childhood malnutrition in the area. The study population comprised of children aged 6-59 months whose mothers gave consent to take part in the study.

Multistage sampling method was used to select the study subjects. Two sub-locations from each of the three locations in the division were sampled. These sub-locations included Thangira, Marura in Kambiti Location; Muhohoyo and Pundamilia in Makuyu East Location and finally Milimani East and Gathara in Makuyu West Location. A structured questionnaire was used to gather quantitative data while focus group discussions and key informant interviews were used to gather qualitative data. The information collected using the questionnaire included information on socio-demographic features; maternal factors, some factors on child care; information on health and health seeking behaviour; and information on housing, water and sanitation.

A total of 385 mothers responded to the study questionnaire. Anthropometric measurements of height and weight of the index child were taken, and together with the age of the index child were converted to anthropometric indices which were used as nutritional status indicators for the children. The chi-square tests of significance and pearsons correlation tests, were used to analyse the relationship between the dependent and the independent variables.

The results of the study showed that 30.5% of the study children were stunted, 10.9% were underweight and 2.8% were wasted. The prevalence of stunting was higher among the female children than among the males (30.8% and 30.2% respectively), while the proportion of wasting and underweight were higher among the males (3.8% and 12% respectively) than among the females (1.8% and 9.9% respectively). The prevalence of stunting and underweight were highest among children aged over 36 months (34.6% and 14.4% respectively) and lowest among children aged between 6-12 months (19.3% and 4.2% respectively), while that of wasting was highest among children aged 18-24 months (4.7%). In general the prevalence of stunting and underweight increased with increase in age while that of wasting was higher among younger children than among older ones.

The main risk factors found to be associated with childhood malnutrition in the study area were, age of the child, the birth order, household income, maternal characteristics, child feeding practices, morbidity and environmental sanitation. Underweight was associated with index child birth order (P=0.000), maternal occupation (P=0.043) and with maternal morbidity status (P=0.041) Stunting on the other hand was associated with the duration of breastfeeding.
(P=0.046) while wasting was associated with whether the children were fed individually or whether they shared a plate with others (P=0.041).

The results of this study provide baseline data for further studies that may carried out in the area. The information shall be used for planning purposes and also in decision making in order to help implement appropriate strategies aimed at improvement of the overall health and nutrition status of the population. The study recommends more awareness creation on health and nutrition as well as sanitation and hygiene. Access to microfinance facilities for women should also be considered. There is also need to strengthen intersectoral collaboration among various sectors and government offices in the study area.