

**PREVALENCE OF UNDER-NUTRITION AMONG SICK CHILDREN AT
THE ELDORET MUNICIPALITY HEALTH FACILITIES**

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Abstract

Background: Infections have adverse effects on nutritional status of children; epidemiological studies show that poor nutritional status can influence the incidence and the severity of infectious diseases. Monitoring weight remains the best choice for nutritional assessment, length is desirable to better track stunting and to assess causes of low weight. Maternal nutritional knowledge is independently associated with nutritional status of the sick child. Nutritional counseling is a good tool for equipping mothers with knowledge on the essentials of childcare in terms of nutritional requirements, health care, feeding and varying degrees of growth.

Objectives: The aim of study was to determine the prevalence of undernutrition among sick children at the Eldoret Municipality Health facilities.

Study design and setting: Cross sectional survey carried out in Eldoret Municipality Health Facilities.

Study subjects: Mother – sick child pairs (n=384) and 12 members of staff treating the child.

Methods: Interviews were carried out using 2 types of questionnaires, one for the medical staff and the other for the mothers. Questionnaires were scored on maternal knowledge and nutritional counseling. Anthropometric measurements taken were weight and length. Subjects were sampled proportionately from the 6 health facilities depending on client flow using the consecutive sampling technique.

Data analysis: Test for significant association between undernutrition and categorical variables was analyzed using chi-square. Independent sample t-test was used to compare significant difference in mean Z-scores between continuous variables. Anthropometric data were analyzed using the WHO Anthro calculator. Z-scores were used to determine prevalence of under nutrition. Summary statistics (Means Frequency tables) were generated using SPSS V.16.

Results: Out of the total 384 children assessed 33%, 12% and 9% were stunted, wasted and underweight. The mean Z- scores for stunting, wasting and underweight were significantly different for the normal ($>-2sd$) and the undernourished ($\leq -2sd$) children. They all had a p-value of <0.001 . Most undernourished children were not detected by the medical staff and anthropometric measurements were not done at the sick child clinic. Most of the mothers 77% had moderate knowledge on the nutritional needs of the sick child; they scored above average in the questionnaire scoring. However, mothers of most undernourished children still had moderate knowledge. More than half of the mothers 58.9% were given low nutritional counseling since they scored below average in the questionnaire scoring. Mothers of most undernourished children had received low nutritional counseling.

Conclusion: Almost half of the sick children were undernourished and diarrhea was the leading sickness. Most undernourished children were not detected by the medical staff because anthropometric measurements were not done at the sick child clinic. Most mothers had moderate knowledge; however mothers of most undernourished children still had moderate knowledge.

More than half of the mothers had received low nutritional counseling and mothers of most undernourished children had received low counseling.