

# Effects of dietary intake and hygienic practices on Nutritional status of children under five years in Mukuru Nyayo slums, Nairobi

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## Abstract:

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Kenya has one of the highest mortality rates among children under five. Inadequate dietary intake and low socio-economic status may contribute to the prevalence of malnutrition. The main objective of the study was to determine the dietary intake, hygienic practices, morbidity and nutritional status of children under five years in Mukuru slums. The study is important for planning and development of nutritional and good sanitation policies. Descriptive research design was used for the study. Research methodology included assessment of nutritional status by anthropometric measurements to determine the weight, height and age of children. Dietary intake assessment was determined using a 24-hour recall. The respondents were mothers with children under five years or caregivers where the mother did not live with the child. Snowball sampling technique was used to identify households with children between 6-59 months. Initial subjects with desired characteristics were identified who named others, giving a total of 1,604. A sample of 10% of the accessible population was enough for a descriptive study. Fowler's method was used to select the sample size of 160 households with children under five years. Data on hygiene practices were collected using interview schedule and observation. Data collected were summarised and analysed using statistical package for social sciences (SPSS) program. Results from analysed data were presented in frequencies, percentages and means. Anthropometric data were analysed using EPI-INFO 2000 computer package. Findings of the study showed that 40.6% of the children were stunted, 13.3% were wasted and 30.5% were underweight. Morbidity was high with 87% children ill. Microbiological analyses of food and water samples revealed that food and water samples were contaminated with both salmonella spp. and coliforms. Spearman correlation coefficient tests were used to determine relationships between dietary intake, hygiene practices, health and nutritional status of children under five years. A level of  $P \leq 0.05$  was used to indicate statistical significance in all analysis. There was a positive relationship between dietary intake and nutritional status of children ( $r = 0.135$ ) and a significant relationship between microbiological quality of food and water. Other variables that were strongly related to the nutritional status were morbidity of children at a significance level of ( $p = 0.025$ ). Nutritional status of children was poor as depicted by high levels of stunting, wasting and underweight. Poor sanitation, morbidity of children, microbiological quality of food and water also contributed to nutritional status of children. The Kenya slum upgrading programme (KENSUP) should be hastened to attain millennium development goals (MDGs) for survival of children and prevention of malnutrition by the year 2015 and also target the vision 2030.