

A Comparative Study of Nutritional Status of Orphans Participating and not Participating in School Feeding Programmes in Kariobangi, Kenya

Arimi, Kinanu Caroline

Abstract:

The Millennium Development Goals highlights Malnutrition as one of the priority development issues under its framework of which malnutrition remains an important public health concern in the developing world especially Kenya (MDGs, 2008). Nutritional status and nutritional food security are a priority as malnutrition is a risk factor for morbidity and mortality, poor cognitive development and reduced productivity (Black, Allen, Bhutta, et al., 2008; Grantham-McGregor, Cheung, Cueto, et al., 2007). The aim of the study was to compare the nutritional status of orphans participating in a school feeding programme and that of orphans not participating in such a programme. The study was a cross-sectional comparative survey carried out in Kariobangi location, Korogocho slum. The population under investigation comprised of 7 schools in Kariobangi location, 3 of which were in the school feeding programme and 4 of which were not. A sample size of 160 orphans aged between 5 to 10 years was determined. Sampling techniques were a combination of purposive sampling and simple random sampling techniques. The research instrument was a questionnaire and an interview schedule. Data was analysed using SPSS, nutrisurvey and anthro plus computer packages. The dependent variable was nutritional status measured by indexes, height for age, BMI for age, and underweight. The findings of the study revealed that school feeding programme had a higher proportion of malnourished children (underweight 20.3%, low Body mass Index for age 16.5% and stunting 19.2%) than the non school feeding programme (underweight 5%, Low Body Mass Index for age 10%, and stunting 20%) although only the low BMI for age was significantly different for the two groups at $P < 0.05$. Calorific intake was inadequate in many of the orphans in both groups but more orphans in the non school feeding group were meeting the recommended dietary allowances for most nutrients compared to those in the school feeding group. Majority of school feeding programme group (61.4%) consumed foods of medium dietary diversity score while majority of non-school feeding programme (61%) consumed foods of high dietary diversity score. (significant at $P < 0.05$). The levels of morbidity in terms of cold/cough and fever were significantly higher in non-school feeding programme compared to the school feeding programme. Multiple logistic regression analysis showed that orphans who stayed for a short time without their mothers were less likely to be underweight in the school feeding programme (OR: 0.78 CI 0.64- 0.94 $P = 0.013$) and stunted in the non- school feeding programme (OR=0.72 CI 0.59-0.88 $P = 0.00$) than those who had stayed for a long time. In terms of low body mass index for age, orphans in the school feeding programme who consumed diets of few food groups were significantly thinner compared to those who had consumed foods of many food groups.(OR= 2.15 CI 1.04-4.12 $p = 0.046$). The study recommended diversification of food within the schools offering feeding programmes through urban farming of vegetables and poultry within the school compound. The Ministry of Education and partners like WFP and others NGOs with interest in school going children need to enlarge the scope of school feeding programme in Kariobangi. It is also necessary to carry out a longitudinal study on the impact of school feeding programmes on orphans

