

Dietary Diversity and Nutritional Status of Pregnant Women Aged 15-49 Years Attending Kapenguria District Hospital West Pokot County, Kenya

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Abstract:

Dietary diversity is an aspect of dietary quality that indicates general nutritional adequacy. Lack of diversified diets is a severe problem in the developing world, where diets are predominantly starchy staples with few animal products, seasonal fruits and vegetables. The nutritional status of a woman during pregnancy is important as a suboptimal diet impacts negatively on the health of the mother, the foetus and the newborn. There is limited knowledge in the area of dietary diversity and factors affecting it among pregnant women despite evidence showing that maternal nutrition has important direct and/or indirect consequences for all other age cohorts. The study aimed to assess the dietary diversity, the nutritional status and factors influencing the two among pregnant women. Cross sectional analytical design was used and the study was carried out in West Pokot County. A sample size of 142 pregnant women was targeted with the first respondent being randomly selected and thereafter systematic sampling was used until the required sample was reached. Mid upper arm circumference (MUAC) of the left arm of the respondents and haemoglobin levels of the women were measured to determine the nutrition status. Data were collected using researcher administered questionnaires and focus group discussion guide. Data were entered and analyzed using SPSS and summarized using descriptive statistics such as frequencies, means and percentages. Data collected using 24 hour recall was analyzed by Nutrisurvey. A P value of < 0.05 was considered statistically significant. The mean dietary diversity score (DDS) was 7.49 ± 1.43 with 20% having high dietary diversity. Significant differences were found in DDS based on marital status with the married more likely to have a higher DDS of $7.56 \pm 1.3b$ and the single had a lower DDS of $5.33 \pm 3.79a$, (ANOVA, $p = 0.027$). There were significant differences in the mean macronutrients and micronutrients with regard to the DDS where respondents with a higher DDS ($> six$) were more likely to have a higher macro and micro nutrient intake compared with those who had a lower DDS ($\leq five$). The mean energy intake was $1909 \text{ Kcal} \pm 630$ which is below the Recommended Daily Allowances (RDA) of 2400 Kcal for pregnant women. Based on MUAC cut offs, 31.7 percent were malnourished (MUAC $< 21.0\text{cm}$) while 68.3 percent of the respondents were normal (MUAC $> 21.0\text{cm}$). MUAC was positively correlated with the socio economic status ($r = 0.229$, $p = 0.006$). Based on the WHO cut offs (Hb $< 11.0 \text{ mmols/l}$), 73.6 percent were anaemic. Regression showed that the age of the mother and the numbers of births were significant predictors of the MUAC of the pregnant women ($p = 0.001$). It is recommended that guidelines for nutrition and diets for pregnant women be developed and disseminated and promotion of dietary diversity and modification of diets be carried out through practical demonstrations in the community and health facilities. The findings of the study may be used by Ministry of Public Health and Sanitation (MOPHS) and other organizations to promote and implement programmes aimed at improving dietary diversity and nutrition status among pregnant women in the County and other counties with similar characteristics.