Factors Influencing the Nutritional Status of Women of Reproductive Age in Teso South Sub-County, Kenya

Erick Maina[1], Samwel Mbugua[1], Lydiah Waswa[1], Michael Krawinkel[2], Ernst-August Nuppenau[3], Irmgard Jordan[4], Elizabeth Kamau[1]

[1]*Egerton University, Department of Human Nutrition, Kenya*

[2]*Justus-Liebig University Giessen, Institute of Nutritional Science, Germany*

[3]*Justus-Liebig University Giessen, Inst. of Agricultural Policy and Market Research, Germany*

[4]*Justus-Liebig University Giessen, Center for International Development and Environmental Research, Germany*

Abstract

Introduction: In spite of the agricultural potential in rural areas, food insecurity and poor quality diets remain a challenge. These contribute to malnutrition, both under and overnutrition among women of reproductive age (18–49 years). This study aimed to investigate the factors influencing nutritional status of women of reproductive age in a rural setting in Western Kenya

Method: A cross sectional nutrition survey was conducted in May-June 2016 (pre-harvest season) targeting a random sample of 418 farm households with women and their children aged 6–59 months in Teso South Sub-County. Semi-structured questionnaires were used to collect socio-demographic and agricultural practices data. The 24-hour dietary recalls were used to assess the women's dietary intakes. The Minimum Dietary Diversity — Women (MDD-W) was calculated as indicator for dietary diversity. Food insecurity was measured using the Household Food Insecurity Experience Scale. The weight and height measurements were assessed to compute body mass index (BMI) of the women.

Results: Among the surveyed households, the prevalence of moderate and severe food insecurity was 23.4 % and 46.4 %, respectively. Mean (SD) women's dietary diversity score was 4.2 (1.24) out of 10 food groups. The most consumed food group was cereals (87.3 %) followed by other vegetables (80.1 %) and dark-green vegetables (65.0 %) while the least consumed were nuts and seeds (4.8 %). The proportion of women who achieved MDD-W was 43.6 %. The prevalence of underweight and overweight/ obese was 10 % and 22.2 % respectively. Bivariate correlation analysis indicated that wealth index (r=0.79, $p = 0.117$), kitchen gardening (r=-0.027, $p = 0.600$), food insecurity (r= -0.063, $p = 0.218$) and dietary diversity (r= -0.022, $p = 0.685$) had no significant correlation with BMI of the women.

Conclusion: These results indicate that wealth index, kitchen gardening, food insecurity and dietary diversity do not have a significant influence on the nutrition status of women in Teso. This implies there may be other significant factors. There is need for further studies considering other variables which may show significant influence on the nutrition status of women in rural settings of Kenya.

Contact Address: Erick Maina, Egerton University, Department of Human Nutrition, Nakuru, Kenya, e-mail: ngimwae@gmail.com