

**Dietary Practices and Nutritional Status among People Living
With HIV/AIDS Attending Selected Comprehensive
Care Clinics in Thika District, Kenya**

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ABSTRACT

The goal of nutritional care and support for PLWHA is to improve nutrition, health, quality of life and duration of survival. Good dietary practices play an important role in the comprehensive management of HIV/AIDS because it improves nutritional status, the immune system, boosts energy and helps in recovery from opportunistic infections. Though HIV/AIDS is a widespread problem in Kenya, there is little information about the dietary practices of PLWHA in the country. The extent to which those infected or affected can maintain good nutritional status of the infected varies widely.

An observational longitudinal study with an aim of determining dietary practices and nutritional status was carried out among PLWHA in Thika District during a period of nine months. The study intervention was dietary counseling involving nutrition education and good dietary practices among PLWHA during the study period. The study centres were Thika District Hospital and JKUAT Hospital Comprehensive Care Clinics (CCC).

Changes in nutritional status were assessed using BMI. The analysis of BMI as a continuous variable was used to evaluate change over time using the linear mixed effects model. The model was used to statistically assess effects of dietary practices and other factors on the nutritional status over time.

Multivariate evaluation of participants' characteristics was managed using standard regression techniques. Statistical significance was set at 95% CI and for all statistical tests $p \leq 0.05$ was considered significant.

Results showed that sex and education were significantly associated with nutritional status as measured by BMI. Females on average had 3.31 units of BMI higher than men ($p < 0.0001$), while participants with secondary education and above had 2.22 and 3.15 units of BMI respectively

higher compared to those with only primary education ($p=0.035$ and $p=0.006$), respectively based on multivariate Wald test. Those living in permanent quarters had BMI lower than those living in semi-permanent/temporary and this was statistically significant ($p=0.014$). The study also showed that income was not significantly associated with change in BMI over time, ($p>0.05$). Time as measured by visit month did not have a significant effect on mean BMI ($P = 0.76$). The predominantly consumed foods for lunch and supper were starchy carbohydrates.

In conclusion, the study has shown that being female and having education higher than primary school level were significantly associated with enhanced nutritional status. This study also found that nutritional counseling during follow up did not significantly influence changes in weight and therefore BMI over time. The participants with a mean BMI of ≤ 18.5 kg/m² were 8.1% while those with BMI ≥ 24.9 kg/m² were 33.7% over time. Therefore, the total proportion of participants with malnutrition (both under and over nutrition) was 41.8%. The implication and recommendations of these findings is that malnutrition is a public health concern in Thika District and nutritional counseling and education alone may not lead to good dietary practices. It is also important to routinely evaluate the various interventions instituted at the comprehensive care clinics in order to determine their effectiveness and plan for appropriate changes when necessary.