

**ASSOCIATION OF DIETARY INTAKE AND SOCIO-DEMOGRAPHIC FACTORS
WITH NUTRITIONAL STATUS OF HIV-INFECTED ADOLESCENTS AT REACH
OUT MBUYA PARISH HIV/AIDS INITIATIVE**

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ABSTRACT

Introduction

Malnutrition is a common problem occurring among HIV-infected individuals worldwide. In Uganda, 36.2% of the adolescents living with HIV are stunted and 18% are wasted. In order to prevent or recover from under-nutrition and maintain good nutritional status, adolescents living with HIV should have adequate dietary intake.

Objective

To determine the association of dietary intake and social demographic factors with nutrition status of HIV-infected adolescents.

Methods

A cross sectional survey was conducted among 149 HIV-infected adolescents attending ROM between March and April 2016. Nutritional status was determined by computing the body mass index of the adolescents. Dietary intake was assessed using 24 hour recall and nutrient intake was calculated using Nutrisurvey 2007 software, which analyses nutrient content of the diet. Nutritional Adequacy Ratio (NAR) was used to determine the adequacy of nutrient intake. NAR equal or above 100% were considered adequate and those below 100% were considered inadequate. Logistic regression was used to determine the independent factors associated with nutritional status. Mann-whitney U test was used to assess the difference in means of dietary intake in males and females for all dietary variables. For all the associations, a p value <0.05 was considered statistically significant.

Results

Of the 149 participants, there were more male participants 51% (76/149), 11.4% (17/149) were undernourished 15.4% (23/149) were stunted. Of all the participants 88.6% (132/149) were of normal BMI/Age ($> -2SD$) and 84.6% (126/149) were of normal height for age ($> -2SD$). There was no significant difference between males and females for both under-nourishment and stunting. The recommended nutrient intake (carbohydrate, and protein) of the participants was met except for fat and energy intake which was less than the required based on the NAR with males having 99.54% and females 88.79%. The NAR of the carbohydrates, protein and fat were above 100% thus adequate intake. Young age (10-14) (OR 0.3, 95% CI 0.09-0.98), poor nutritional knowledge (OR 0.04, 95% CI 0.002-0.81) and low carbohydrate intake (OR 0.1, 95% CI 0.02-0.82) were associated with high risk of under-nutrition.

Conclusion

Majority of the HIV-infected adolescents have a good nutritional status. There is low intake of energy and fat with adequate intake of carbohydrate and protein. Poor nutritional status is associated with being a younger (10-14) adolescent, having poor nutritional knowledge and low carbohydrate intake. Targeted interventions are required to improve nutritional status among this group.