

MALNUTRITION AMONG PEDIATRIC ONCOLOGY PATIENTS AGED 2-18 YEARS

Siann Baldeo

Project Supervisor: Dr. Sa'eed Bawa

2013

Background: In developed countries, cancer has become one of the most popular causes of death-related illness in children and is rising in Trinidad and Tobago. Likewise, cancer related malnutrition and cachexia in this particular population is among the most familiar contributors of death among developing nations. Stages of anticancer treatment within the paediatric population can become very energy consuming and may negatively affect their nutritional status and in turn psychological as well as physical aspects of development. Adequately assessing nutritional status and nutritional habits is therefore of major importance for timely and appropriate nutritional intervention and in turn to prevent associated complications arising from malnutrition and its subsequent cachexia in pediatric oncology patients.

Objective: To assess the magnitude of malnutrition and/or prevalence of nutrient deficiencies in pediatric oncology patients aged 2-18 years.

Design: A total of 25 (16 females, 9 males) pediatric oncology patients were interviewed as well as their parents, in some instances using convenience sampling. The data collection was conducted at the outpatient clinic, Mt. Hope, (EWMSC), Eric Williams Medical Sciences Complex, including the completion of a food frequency questionnaire and three-day dietary recall. Data was analyzed using Excel and SPSS 20.0 and the statistical test performed was ANOVA.

Results: There were significant deficiencies in the macro- and micronutrients analyzed in all age groups studied. There was also a high prevalence of undernourishment and malnutrition. There was found to be an insufficient intake of foods containing energy yielding nutrients as well as vitamins and minerals as required to compensate for the children's increased level of energy expenditure. The diet consumed by most patients was of poor nutritional value, insufficient amounts and also noted was the absence of dietary supplements.

Conclusion: High prevalence of undernutrition/malnutrition was found in pediatric oncology patients. The employment of various medical nutrition therapies are needed to treat the existing energy and nutrient deficiencies and thereby reduce the increase in cost of care to the patients' family. Appropriate nutrition intervention can increase the quality of life of the patients' and decrease the risk of morbidity.