

Assessment of Factors Influencing Adherence to Diet Guidelines among Patients with Type II Diabetes Mellitus

Authors : Mary Wangari Kamau, Agatha Christine Atieno, Louise Wanjiku Ngugi

Abstract : Diabetes Mellitus Type 2 is a prevalent disease in Kenya, with complications often resulting from poor adherence to dietary guidelines. This study aims to identify and understand the factors influencing adherence to diet guidelines among patients with Diabetes Mellitus Type 2 at a specific clinic in Kenya. The findings will contribute to the improvement of nutrition care for diabetic patients. Research Aim: The main objective of this study was to determine the factors that influence adherence to dietary guidelines among patients with Diabetes Mellitus Type 2. Specifically, the study described the level of diet adherence, identified factors influencing adherence using the ecological approach, and determined the relationships among these factors. Methodology: A cross-sectional study design was utilized at the Cancer and Chronic Diseases Center at Moi Teaching and Referral Hospital in Kenya. The sample size consisted of 241 respondents from a target population of 412. Data was collected using food frequency questionnaires, three-day food records, and key informant interviews. Descriptive statistics were used to assess diet adherence, and chi-square and odds ratio tests were applied to identify factors at various levels of the ecological model. Multiple linear regression was employed to determine the relationship between diet adherence and ecological factors. Findings: The mean level of adherence to recommended dietary guidelines for Diabetes Mellitus Type 2 patients was 48.6%. Individual level factors, such as marital status, monthly income, duration of Diabetes Mellitus, frequency of monitoring blood sugar levels, treatment for Diabetes Mellitus, and BMI, were found to significantly influence diet adherence. However, cognitive and psychological factors at the individual level were not significantly associated with adherence. No significant associations were found between adherence and factors at small group, organizational or health care system, community, and policy levels. However, when considering all levels collectively, 43% of the variance in diet adherence could be explained. Theoretical Importance: This study highlights that while individual factors play a significant role in adherence to dietary guidelines, environmental factors also have an influence. The findings support the need for health professionals and policymakers to consider factors at multiple levels when improving adherence to dietary guidelines for diabetic patients. Data Collection and Analysis Procedures: Data was collected through questionnaires and interviews, including food frequency questionnaires and three-day food records. Descriptive statistics, chi-square tests, odds ratio tests, and multiple linear regression were used to analyze the data. Questions Addressed: The study addresses the following questions: 1. What is the level of adherence to dietary guidelines among patients with Diabetes Mellitus Type 2? 2. Which factors at individual, small group, organizational or health care system, community, and policy levels influence diet adherence? 3. What is the relationship between these factors and diet adherence? Conclusion: The study findings emphasize the need to consider both individual and environmental factors when promoting adherence to dietary guidelines among patients with Diabetes Mellitus Type 2. Health professionals and policymakers should incorporate factors at multiple levels to improve the nutrition care process for diabetic patients.

Keywords : adherence, dietary guidelines, ecological factors, type 2 diabetes mellitus

Conference Title : ICFSN 2024 : International Conference on Food Science and Nutrition

Conference Location : New York, United States

Conference Dates : April 22-23, 2024