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Review Article

Self-care Analysis of Patients with Diabetes Mellitus

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Abstract

The objective of this study is to investigate the nutritional self-care practices and skills of patients with diabetes mellitus. A systematic review was conducted to identify relevant studies. The studies showed that patients with diabetes mellitus have inadequate nutritional self-care practices and skills. The most common nutritional self-care practices and skills that were found to be inadequate included dietary planning, portion control, carbohydrate counting, and label reading. Factors such as lack of knowledge, lack of motivation, and social and economic factors were identified as barriers to nutritional self-care. Strategies to improve nutritional self-care practices and skills among patients with diabetes mellitus include tailored nutrition education, social support, and addressing barriers to self-care. Further research is needed to identify effective interventions to improve nutritional self-care practices and skills among patients with diabetes mellitus.

Keywords: Diabetes mellitus; Self-care analysis; Patients; Dietary control.

Introduction

Dietary control reduces and/or prevents the morbidity and fatalities linked to diabetes mellitus. Yet, the majority of diabetic patients do not consider diet to be the most challenging component of controlling the disease, the patients engage in optimal nutritional treatment of diabetes [1]. In this study, patients with diabetes who were visiting a hospital in Ghana were asked to explore and characterize the habits and knowledge regarding dietary management of diabetes mellitus [2].

The self-care analysis of patients with diabetes mellitus focuses on empowering individuals to actively manage the condition [3]. Diabetes is a chronic metabolic disorder characterized by elevated blood sugar levels,

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and effective self-care is essential for its management. This multifaceted approach encompasses dietary choices, regular physical activity, medication adherence, blood glucose monitoring, stress management, and routine health check-ups [4]. By encouraging patients to take an active role in care, self-care aims to enhance overall well-being, prevent complications, and optimize long-term health outcomes for individuals living with diabetes [5,6]. The most dangerous pandemic in the world today is diabetes mellitus, when diabetes is left undiagnosed, unmanaged, or poorly managed, it can lead to a number of consequences, including lower limb amputation, stroke, heart attack, blindness, and kidney disorders [7]. The spread of diabetes and its effects is currently endangering the health systems in sub-Saharan Africa. The illness and its repercussions could overwhelm healthcare systems and reduce household spending. Diabetes was the cause of 1.5 million deaths worldwide in 2012 [8,9]. 2.2 million fatalities in the same year were related to cardiovascular disease and other conditions brought on by excessive blood sugar levels. The number of diabetes-related deaths rose sharply in 2017. Here is because the illness claimed the lives of four million people, or one person every eight seconds. This number of diabetes-related deaths outnumbered all HIV/AIDS-related deaths combined, malaria and tuberculosis [10].

Figure 1: Monitoring of blood glucose level.

Resources and techniques

Area of study and research plan

Stress management: Stress can impact blood sugar levels. Patients should adopt stress-reducing techniques such as mindfulness, meditation, or yoga to maintain emotional well-being.

Monitoring blood glucose levels: Regular monitoring of blood glucose levels is crucial

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for understanding how different factors affect diabetes control. Patients may need to check their blood sugar levels at home and adjust their self-care routine accordingly. This study was conducted using an exploratory, descriptive qualitative research design technique Sampling size and sampling technique.

Data collection

Data was acquired from the participants utilizing a semi-structured interview guide (S1 file). The interviews were done by the principal author, who has training and education in conducting qualitative interviews. An interview guide was used to conduct the interviews, this was initially tested on three diabetic patients at a university hospital in Ghana. The interview questions in the interview guide were open-ended and focused on the participants' daily dietary intake, routines, and habits related to the nutritional treatment of diabetes mellitus. Also, their knowledge of and practices in reading food labels and meal planning were probed.

Based on the participants' responses, additional inquiries were made.

Data evaluation

The data was examined using the data analysis technique developed by Braun and Clarke. The English-language audio recordings of the interviews were first verbatim transcribed.

Discussion

For diabetic patients to have beneficial health outcomes, such as the maintenance of a healthy body weight and blood glucose levels, they must regularly eat lunch. The majority of the study's participants said they frequently ate lunch.

During lunch, they often ate moderate amounts of eggs, chicken, cereals, legumes, oil, and whole grains while consuming high amounts of staple foods, vegetables, and fish. As a result, the participants often eat a lunch of wholesome proteins, carbohydrates, and fats. These results are consistent with those of a research Li, et al., conducted in China.

Result

All fifteen participants recruited and interviewed were Ghanaians.

The number of years they had been diagnosed with diabetes mellitus ranged from 2 years to 30 years, whiles their ages Ranged from 42 years to 86 years. Out of the fifteen participants, seven were males and eight were females.

Conclusion

Optimal nutritional management of diabetes mellitus by patients living with the condition involves their ability to choose and consume healthy sources of carbohydrates, protein, and Fats; eat the right quantity of foods; possess adequate skills to efficiently plan meals; and read and use food labels. This study showed that the participants ate the right quantity of foods; consumed healthy carbohydrates, proteins, and fats; had adequate meal planning skills; and had deficient knowledge and skills in the reading and usage of food labels.

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