

Diet and its Effects on Diabetes: Literature Review

Deanna Braden

Lakeview College of Nursing

Dr. Ariel Wright

July 8, 2022

Diet and its Effects on Diabetes: Literature Review

Maintaining a balanced nutritional diet is essential for preventing and managing diabetes. If a person consumes a diet high in calories, cholesterol, and fat, it increases their risk of diabetes. A poor diet can lead to obesity (a risk factor for diabetes) which can cause an increase in fatty acid levels and inflammation that leads to insulin resistance (Hinkle & Cheever, 2018). The most important objectives in the nutritional and dietary management of diabetes are control of blood glucose levels, total caloric intake to attain or maintain reasonable body weight, and normalization of lipids and blood pressure to prevent heart disease (Hinkle & Cheever, 2018). Management of these things can result in hyperglycemia reversal in type 2 diabetes. A qualified registered dietician usually constructs a Medical Nutritional Therapy (MNT) plan for managing diabetes, but patients can find it challenging to achieve these goals. (Hinkle & Cheever, 2018).

Do Patients Value Nutritional Therapy? A Quantitative Study in Type 2 Diabetes Patients

Nurses and health care team members need to be knowledgeable about nutritional therapy and supportive of patients who need to implement nutritional and lifestyle changes. Type 2 diabetes patients' adherence to nutritional therapy or lifestyle change behaviors is lower than pharmacotherapy because they find it more challenging and do not value nutritional therapy at the same level as other interventions (Ezequiel et al., 2017). This study aims to analyze the values that Type 2 Diabetes patients place on nutritional therapy and identify barriers to adherence to nutritional therapy (Ezequiel et al., 2017).

Key Points

The authors of this article use a quantitative study using a non-random sample of 62 patients receiving health care in a Diabetes Clinic in the municipality of Faro in the Portuguese region of the Algarve (Ezequiel et al., 2017). The criteria for the participants to be part of the study were to have a medical diagnosis of Type 2 Diabetes Mellitus for at least 12 complete weeks, age below 85 years, and have been at least in one individual consultation with a registered dietitian in the past year. The researchers use an anthropometric assessment using standard methods and data collection from the patient's clinical files (Ezequiel et al., 2017). The data consists of height, weight, waist circumference (using standardized methods), and additional clinical data (HbA1c and lipid profile) (Ezequiel et al., 2017). The four tables to calculate the data consist of: Anthropometric, dietary, and clinical characteristics of the sample; Perceptions on the quality of dietary intake and importance for diabetes control and management, assessed on 5-point Likert scales; Advice given by health professionals; Statements about barriers to comply with nutrition recommendations (Ezequiel et al., 2017). The data is significant and shows that patients show poor dietary intake, with a prevalence of 36% of overweight patients and 53% of obese patients (Ezequiel et al., 2017).

Assumptions

One assumption is that barriers cause patients with Type 2 Diabetes to be non-compliant with nutrition recommendations (Ezequiel et al., 2017). The barriers can be from a lack of knowledge or that the patient finds it too difficult to follow the diet plan. Another assumption is that patients with Type 2 Diabetes are obese because of poor nutrition consisting of fats, cholesterol, and that are high in calories. The author discusses that barriers need to be known through more studies to improve adherence to nutritional therapy in patients with Type 2 Diabetes.

Deficit/Conclusion

This study concludes that Type 2 Diabetes patients perceive nutrition as an essential part of their treatment plan but find pharmacologic therapy more valuable because they find nutritional recommendations difficult (Ezequiel et al., 2017). There are clear guidelines for the construction of meal plans and sufficient evidence in the literature to support the effectiveness of nutritional therapy for Type 2 Diabetes patients (Ezequiel et al., 2017). Future research must address how educational, economic, cultural, or psychosocial characteristics may hinder compliance with nutritional recommendations (Ezequiel et al., 2017). The authors' line of reasoning is acceptable. If nursing fails to accept this line of reasoning, the results of poor nutrition and obesity will continue to rise in patients with diabetes.

References

- Ezequiel, P., Nídia, B., Tânia, N., & Eurico, G. (2017). Do patients value nutritional therapy? A quantitative study in type-2 diabetes patients. *International Journal of Diabetes and Clinical Research*, 4(2). <https://doi.org/10.23937/2377-3634/1410079>
- Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer.