

Factors Associated with Diabetes Activities for Self-Care in Type 2 Diabetes Patients Using the Self-Determination Theory

Authors : Hassan Okati-Aliabad, Athare Nazri-Panjaki, Mahdi Mohammadi, Alireza Ansari-Moghaddam

Abstract : Aims: In type 2 diabetes control, self-management is an effective way to minimize the risk of developing complications and improve the quality of life. Self-determination theory (SDT) proposed a promising explanatory framework to predict self-regulated behavior, which was particularly relevant to self-management. This study aimed to investigate whether SDT constructs can affect the self-management and controlling glycated hemoglobin A1c levels in type 2 diabetic patients or not. Methods: This cross-sectional study was conducted from August to December 2022 at two diabetes clinics in Zahedan, Iran. The study included 300 patients with type 2 diabetes. Data collection was done using a researcher-administrated questionnaire that included demographic data, diabetes self-care activities, and self-determination constructs including autonomous support, autonomous motivation, and perceived competence. Results: The mean of the overall score of self-care activities was 34.62 ± 11.86 out of a maximum of 70. Patients in the fourth quarter (wealthiest) of the socioeconomic status had the highest mean self-care score ($P=0.003$). There was a significant relationship between diet score with perceived competence ($P=0.009$). Perceived competence ($P<0.001$) and controlled self-regulation ($P<0.001$) were the predictors of exercise scores in diabetes patients. Independent self-regulation ($P<0.001$, $r=0.21$) and overall self-regulation ($P=0.001$, $r=0.19$) were significantly related to blood-glucose testing scores. There was a significant relationship between foot care score with perceived competence ($P=0.048$, $r=0.11$) and autonomous support ($P=0.013$, $r=0.14$). Multiple regression showed that exercise was the predictor of HbA1c ($P=0.014$). Conclusion: Exercise is crucial for achieving good individualized glycemic control and reducing the risk of diabetes complications. The findings provided valuable insights into the determinants of self-care activities in patients with type 2 diabetes and underscore the need for interventions that address socioeconomic disparities, enhance perceived competence, and provide autonomy support to improve diabetes self-care.

Keywords : self-care activities, diabetes mellitus type 2, blood glucose self-monitoring, health behaviors, self-determination theory

Conference Title : ICMHS 2025 : International Conference on Medical and Health Sciences

Conference Location : Brussels, Belgium

Conference Dates : March 24-25, 2025