Abstract in English

Diabetes Self-Management among Adult Omanis with Type 1 Diabetes Mellitus

Rajaa Al Hadhrami[1], Omar AL Rawajfah[2], Joshua Muliira[2]

[1] **Emergency Medicine, SQUH**

[2] **College of Nursing, SQU**

Abstract

Background: The prevalence of diabetes mellitus (DM) has been increased globally. About 451 million people were living with DM in 2017 and this number is estimated to be 693 million by 2045. In Oman, about 367,700 adults were diagnosed with DM in 2017 and the prevalence is estimated to be 10.7%. Because of the growth up of DM locally and internationally, the number of complications and deaths related to DM will be increased. Diabetes self-management (DSM) is considered a key element in improving diabetes quality of life, achieving glycemic control and reducing or preventing DM complications. To date, there is no study done among adult Omanis with type-1DM (T1DM) to assess their DSM.

Purpose: The aim of this study was to assess the level of DSM among adult Omanis with T1DM and to examine factors that may affect their DSM. Furthermore, the study aimed at assessing self-efficacy, social support, and diabetes knowledge and possible association with DSM.

Methods: A Cross-sectional, descriptive design using standardized questionnaires about DSM, self-efficacy, social support and diabetes knowledge was used. A convenience sample of 210 adult Omanis with T1DM was recruited from three referral centers in Oman.

Results: Findings indicated that the participants had inadequate level of DSM and self-efficacy, and level of social support and poor glycemic control. Further, the study showed that participants had moderate diabetes knowledge. Moreover, there was a positive association between DSM and self-efficacy, social support and diabetes knowledge and negatively associated with glycosylated hemoglobin (HbA1c). Finally, multiple linear regression showed self-efficacy, social support, employment status, other chronic disease and high income were significant predictors of DSM.

Conclusion: This study provided information about the level of DSM and the associated factors among T1DM adult Omanis. Results from this study have demonstrated that the DSM is a critical factor for better glycemic control among T1DM Omanis. Further, the study demonstrated that DSM of T1DM adult Omanis is associated with their self-efficacy, social support and diabetes knowledge.