RELATIONSHIP OF SELF-EFFICACY WITH THE QUALITY OF LIFE OF TYPE 2 DIABETES PATIENTS

Premalatha Paulsamy[*1], Krishnaraju Venkatesan[2], Ramasubbamma Ramaiah[1], Ester Mary Pappiya[3], Pranave Sethuraj[4]

[1*]College of Nursing for Girls, King Khalid University, Khamis Mushayit, Asir Province, Saudi Arabia.
[2]Department of Pharmacology, College of Pharmacy, King Khalid University, Abha, Asir Province, Saudi Arabia.
[3]Regional Nursing Administration, Directorate of General Health Affair, Ministry of Health, Najran, Kingdom of Saudi Arabia.
[4]Vee Care College of Nursing Chennai, Tamilnadu, India.

ABSTRACT

Life style changes in diabetic patients are mandatory in the management of the disease to maintain the blood glucose levels within normal limits and prevent complications. Self-efficacy of the DM patients will persuade them in making decisions about their self-care management. This study was aimed to determine the DM patients' self-efficacy and its' relationship with quality of life of them. A cross sectional, descriptive design was adopted and data was collected from 100DM patients using a self-administered Diabetes Management Self-Efficacy Scale (DMSES) and the Medical Outcomes Study Short Form (SF-36) Health Survey is used to assess quality of life. The results showed that 84% of patients with good self-efficacy have a good quality of life, the chi-square test revealed a positive correlation with self-efficacy and quality of life (p<0.01), which says that the DM patients with good self-efficacy have good quality of life. Appropriate and systematic education is essential to improve self-efficacy and improve the quality of life of diabetic patients.

KEYWORDS

Diabetes mellitus, Self-efficacy, Quality of life, Diabetes Management Self- Efficacy Scale (DMSES) and Medical outcomes study short form (SF-36) health survey.

Author for Correspondence:
Premalatha Paulsamy,
College of Nursing for Girls, King Khalid University,
Khamis Mushayit, Asir Province, Saudi Arabia.

Email: pponnuthai@kku.edu.sa

INTRODUCTION

Diabetes is a complicated condition that needs long-term care. Diabetes patients may undergo both physical and psychological changes. Changes in vision, peripheral nerves, blood vessels of the heart, bodily weakness and peripheral vascular disease are among the physical changes that occur[1]. While

psychological changes such as worry, melancholy, hopelessness, and criticism about the disease might occur, the complexities of the challenges that diabetes patients face might lead to alterations in their quality of life[2]. Lower quality of life and psychological issues can exacerbate metabolic illnesses, both directly and indirectly through hormonal stress response[3].

Self-efficacy is a person's belief in his ability to systematize and carry out specific actions in order to get the desired results. Self-efficacy enables a person to make well-informed decisions and to stick to the course of action. In the long or short term, self-efficacy can be anticipated to have a good quality of life[4]. Individuals with diabetes require self-management and self-efficacy in order to plan the nutrition, blood sugar control, physical activity, medications, and diabetes care in general[3,5]. As the self-efficacy will assist DM patients in managing and controlling their health status, lack of self-efficacy in a person with this chronic disease will have a negative impact on their quality of life[5,6].

Through there has been numerous research that show a link between self-care activities and blood glucose control among DM patients[7,8], for diabetics, adopting self-care behaviours remains a difficulty always[9-11]. Diabetes control necessitates self-management and person suffering from diabetes have a lower quality of life than someone with no chronic illnesses. As self-efficacy is a good predictor of diabetes self-management behaviours, the purpose of this study was to determine the self-efficacy and its' relationship with quality of life of type 2 diabetes mellitus patients.

MATERIAL AND METHODS
A cross sectional, descriptive design was adopted and data was collected from 100 DM type 2 patients who were selected using purposive sampling technique. A modified Diabetes Management Self-Efficacy Scale (DMSES) with minor demographic adjustments was used to collect the data. The Medical Outcomes Study Short Form (SF-36) Health Survey is used to assess quality of life. The patients who were not hospitalization during the interview and have no history of any psychological disorders such as mood and anxiety disorder was included for the study. The information gathered is processed and analyzed using SPSS software and a chi-square test with a significance level of 5%. (0.05).

RESULTS AND DISCUSSION
According to Table No.1, the most of the patients are in the age category 46-55 years old, with 39(39%) being female and 61 being male (61%). In terms of education, around 37 patients (37%) studied up to high school. 31(31%) patients are housewives, with the majority suffering from diabetes for less than 10 years (about 64%). The results show that the type -2 DM was high among with patients aged between 46-55 years, males have more frequency of DM and 64% of patients had the disease for less than 10 years.

The results showed that 84% of patients with good self-efficacy have a good quality of life, while 29.5% of patients with low self-efficacy have a good quality of life. This may be because of various other reasons such as good social support, financial ease etc. To elicit the difference, a longitudinal study can be done. The chi-square test revealed a positive correlation with self-efficacy and quality of life (p<0.01), which says that the DM patients with good self-efficacy have good quality of life. The findings are in line with research conducted by Gao J *et al*, (2013)[11], which found that the majority of patients with type 2 diabetes (71.43%) have low levels of self-efficacy, but another study found that more than half of respondents (52.7%) have high levels of self-efficacy[12].

Table No.1: The Characteristics of Type 2 Diabetic patients

S.No	Characteristics	Frequency	Percentage
Age			
1	26-35 years	7	7
2	36-45 years	33	33
3	46-55 years	38	38
4	56-65 years	22	22
Sex			
5	Female	39	39
6	Male	61	61
Level of education			
7	Primary School	24	24
8	Middle School	17	17
9	High School	37	37
10	Higher sec. School	20	20
11	Bachelor Degree	2	2
Job			
12	Unemployed/ Housewife	31	31
13	Government employee	11	11
14	Private employee	15	15
15	Self Employed	23	23
16	Retired	19	19
Suffering from diabetes			
17	Less than 10 years	64	64
18	More than 10 years	36	36

Table No.2: Relationship between Self-efficacy and Quality of Life among Diabetic Patients

S.No	Self-Efficacy	Quality of life		Total	p
		Good	Low		
1	Good	19	3	22	
2	Low	23	55	78	0.01
3	Total	42	58	100	

CONCLUSION

The main aims of diabetes management are to prevent microvascular and macrovascular problems and to decrease mortality and financial costs due to diabetes. Based on the findings of the present study, the self-efficacy and self-management of DM patients are most vital as well as it improves the quality of life of the patients. Hence, it is mandatory to improve the patient - provider communication and knowledge of patients regarding self-management of diabetic patients.

DECLARATION OF CONFLICTING INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

BIBLIOGRAPHY

1. Waspadji S. Chronic complications of diabetes: Occurrence mechanism, *Diagnosis and Management Strategy,* 2015.
2. Amelia R, Yunanda Y. Relationship between depression and glycemic control among patients with type 2 diabetes in Medan, *IOP Conference Series: Earth and Environmental Science,* 125, 2018, 012170.
3. Amelia R, Damanik H A, Lindarto D and Mutiara E. The correlation between the level of HbA1c with total serum cholesterol of uncontrolled Type 2 diabetes mellitus patients in Binjai, Sumatera Utara, *Adv. Sci. Lett,* 23(4), 2017, 3610-3613.
4. Pratiwi W R. Self-efficacy relationship with quality of life in patients with type 2 diabetes mellitus in internal medicine specialty clinic hospital, *Dr. M. Djamil Padang (Padang: Universitas Andalas,* 2016.
5. Ariani Y. Relationship between self-motivation self-efficacy patients with type 2 dm in context nursing in haji adam malik hospital in Medan, *Research Report,* 2011.
6. Derakhshanpour F, Vakili M A, Farsinia M and Mirkarimi K. Depression and quality of life in patients with type 2 diabetes, *Iran Red Crescent Med J,* 17(5), 2015, e27676.
7. Asche C, La Fleur J, Conner C. A review of diabetes treatment adherence and the association with clinical and economic outcomes, *Clin Ther,* 33(1), 2011, 74-109.
8. Jordan D N, Jordan J L. Self-care behaviors of Filipino-American adults with type 2 diabetes mellitus, *J Diabetes Complications,* 24(4), 2010, 250-258.
9. Beard E, Clark M, Hurel S, Cooke D. Do people with diabetes understand their clinical marker of long-term glycemic control (HbA1c levels) and does this predict diabetes self-care behaviours and hbA1c? *Patient Educ Couns,* 80(2), 2010, 227-232.
10. Vosoghi Karkazloo N, Abootalebi Daryasari G, Farahani B, Mohammadnezhad E, Sajjadi A. The study of self-care agency in patients with diabetes (Ardabil), *Mod Care,* 8(4), 2012, 197-204.
11. Gao J, Wang J, Zheng P, Haard Orfer R, Kegler M C, Zhu Y and Fu H. Effects of self-care, self-efficacy, social support on glycemic control in adults with type 2 diabetes, *BMC Family Practice,* 14(1), 2013, 66.
12. Amelia R, Ariga R A, Rusdiana, Sari M I and Savira M. Self-efficacy in type 2 diabetes mellitus patients and the relationship with the quality of life in Medan city, *Journal of Physics: Conference Series,* 1116(5), 2018, 052003.

Please cite this article in press as: Premalatha Paulsamy *et al.* Relationship of self-efficacy with the quality of life of type 2 diabetes patients, *International Journal of Nursing and Healthcare Research,* 5(1), 2021, 12-15.