

## ORIGINAL ARTICLE

## Quality of Life of Patients with Diabetes Mellitus

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## ABSTRACT

**Objective:** The aim of the study is to assess the quality of life of diabetics.**Method:** This is a descriptive cross-sectional study. 200 adults with diabetes, including 110 females and 90 males, were randomly selected from patients receiving treatment in Sharqat General Hospital in Salah al-Din Governorate. Data collection took place between January 1<sup>st</sup>, 2022 and February 5<sup>th</sup>, 2022 through the use of an interview. The data was analyzed by applying descriptive statistical analysis that included number, percentage, mean, standard deviation, p-value and anova.**Results:** When it comes to age groups, the participants were mostly from the age group of 57 years and older (40,5%). The results showed that diabetes was more prevalent in females than in males (55%). The sample comprised almost all married patients (97,5%). As for the education level, a great majority of the participants were primary school graduates (43,5%).**Conclusions:** This study supported the effect of diabetes on the quality of life of patients in our country. It was also observed that the information obtained about the disease was acceptable, but the safety precautions against the disease were weak.**Keywords:** Diabetes mellitus, Patients, Quality of life.

## INTRODUCTION

Diabetes mellitus (DM) is a public health problem in all parts of the Arabian Gulf, especially in the Republic of Iraq, and a significant rise has been seen in the number of people with diabetes in the past few years. This condition has already affected more than 25% of the adult population - a concerning fact. What's more, that figure is expected to rise even further by 2030). Over the past few years, the number of people with diabetes has increased almost ten times in Iraq. When people suffer from diabetes and cannot manage it well, this can cause many problems in the blood vessels <sup>(1)</sup>. Chronic high blood glucose is a symptom of diabetes. According to the International Diabetes Federation. This symptom could develop because the body isn't producing enough insulin, or the body isn't able to use insulin properly. The diagnosis of diabetes was established in people aged between 20 and 79 in 2015. Chronic hyperglycemia and other metabolic problems in diabetics may increase the risk of developing physical and mental health issues in the long run (cardiovascular diseases, blood diseases, neuropathy, diabetic foot, stroke, etc.). Glycemic control and dietary and lifestyle changes that lead to a twofold increase in blood glucose levels have an effect on many social aspects and daily life, as well <sup>(2)</sup>. Many people with diabetes around the world would be at risk if they do not treat it. Millions or even a billion people may outnumber patients who need preventive interventions for diabetes care, such as how to use medications correctly <sup>(3)</sup>. QoL can be used to summarize an individual's life in every way - hence making it different from other aspects of QoL. As such, physical, emotional, mental, and social performance are also taken into account when talking about health-related quality of life (HRQoL). At a particular time or period of time, it is important to know how a patient's QoL changes <sup>(4)</sup>. Health-related quality of life (HRQL) is a concept or method that refers to measurement of one's health and has become more important for healthy people, such as workers in recent years. There is no single definition of HRQL since it has been used in many different ways. HRQL stands for how health status affects the factors that make people's life better <sup>(5)</sup>.

## METHODOLOGY

The study aims to assess the factors affecting the quality of life for patients with diabetes mellitus. The study was conducted based on quantitative descriptive cross sectional design between the first week of January 1<sup>st</sup>, 2022 to February 5<sup>th</sup>, 2022, to assess the quality of life of diabetic patients in the Sharqat City, Iraq. The study was conducted in a hospital affiliated with Salah Al-Din Health Directorate and located in the northern part of the Al-Sharqat city. The hospital was established in 1971 and offers healthcare to all patients in the governorate. The sample of this study consisted of 200 people with diabetes who fulfilled the inclusion criteria, aged 18 years and over, and had no mental retardation, and were diagnosed with diabetes in accordance with purposive sampling.

The tools consist of two parts: Part I: Socio-demographic data: This part consists of 9 items, which include age, gender, marital status, education level, occupation, financial status, residence place, number of family members in the house, and number of children. Part II: Quality of life questionnaire: The scale developed by WHO and whose Arabic validity and reliability study was conducted by <sup>(6)</sup> was used. Data collection took place from January 1<sup>st</sup>, 2022 to February 5<sup>th</sup>, 2022. It took approximately 15-20 minutes for each participant to complete the interview. The data was analyzed in SPSS version 20. The number, percentage, arithmetic, mean and standard deviation as well as one-way ANOVA and t test were used to assess the data. The level of significance was set as  $P \leq 0.05$ .

## RESULTS

Table 1: Statistical distribution of the participants according to their demographic data.

Demographic data	n	%	
Age	18 – 25 years	5	2,50
	26 – 33 years	3	1,50
	34 – 40 years	6	3,00
	41 – 48 years	38	19,00
	49 – 56 years	67	33,50
	57 years and older	81	40,50
Gender	Male	90	45,00
	Female	110	55,00
Marital status	Single	5	2,50
	Married	195	97,50
Occupation	Employed	30	15,00
	Housewife	88	44,00
	Self-employed	16	8,00
	Unemployed	29	14,50
	Retired	37	18,50
Monthly income	Sufficient	30	15,00
	Barely Sufficient	108	54,00
	Insufficient	62	31,00
Residence place	Urban	78	39,00
	Rural	122	61,00
Total	200	100%	

Table 2: Statistical distribution of Quality of Life Domains.

Quality of Life Domains	n	%	Mean ± SD
1- Physical health	Poor	11	5,5
	Moderate	159	79,5
	Good	30	15,0
2- Psychological	Poor	12	6,0
	Moderate	128	64,0
	Good	60	30,0
3- Social	Poor	4	2,0
	Moderate	30	15,0
	Good	166	83,0
4- Environmental	Poor	7	3,5
	Moderate	146	73,0
	Good	47	23,5
Overall Quality of Life domains	Poor	5	2,5
	Moderate	139	69,5
	Good	56	28,0

Abbreviation: SD=Standard Deviation

Table 2 demonstrates the distribution of descriptive statistics for the domains of QoL according to patients' overall quality of life. This table confirms that the highest mean in the social domain (Mean  $\pm$  SD=72,86  $\pm$  14,08), while the lowest mean of score was seen in physical domain (Mean  $\pm$  SD=54,95  $\pm$  12,67).

## DISCUSSION

The current study aimed to describe the picture of diabetic patients from several aspects. The findings of the study showed that the participants were mostly from the age group of 57 years and older, (40,5%) and this result may indicate that the incidence of diabetes increases with age. This study is compatible with the results of a previous study<sup>(7)</sup>. The results of the study indicated that the majority of the participants were female (55%). These findings are compatible with other findings from a number of previous studies<sup>(8-13)</sup>. This could be because there were more women than men over 50, some of whom were widowed, overweight or obese and had a low level of education. The results of the study showed that the majority of people with diabetes were married (97,5%). These results are similar to two other studies<sup>(14,15)</sup>. Marital status did not change as a result of diabetes. The patient and his wife's relationship was the same before and after they were diagnosed with diabetes; this occurred because the patient and his wife's strong social relationship is one of the main features of Iraqi society, which helped the patient and his wife overcome the difficulties they faced in life together. The physical domain of quality of life includes such as energy, fatigue, pain, insomnia, mobility, sleep or rest, and the ability of a diabetic to work. It was found that many diabetic patients had the lowest quality of life when it came to their bodies. In general, a person's physical condition changes depending on how sick they are and how many other things are going on in their lives. Being an elderly and a female has an effect on the physical domain. Most of the participants were over 45 years old. Then, they got older and their bodily functions started to go down. Age was associated with higher blood glucose levels and a poor ability to use glucose. It could have a great impact on their daily lives, energy use, and mobility. Exercise is very important for people with diabetes<sup>(16)</sup>. As for the psychological domain of QoL, the present study revealed that the majority of patients got a fair score, and this finding is compatible with a study conducted by<sup>(17,18)</sup>. The psychological domain is the state of an individual's feelings and spirit including his feelings about himself, positive and negative feelings, spirituality, the ability to think, and the ability to focus. Mental health affects how well their live and how you react to things. It has been found from previous studies and research on the correlation between QoL and DM that the good psychological adjustment of patients depends on the family members who support this and the family is a major source of support. It is the best reflection of the patient's psychological adjustment to the disease<sup>(19)</sup>.

## CONCLUSION

This study supported the effect of diabetes on the quality of life of patients in our country. It was also observed that the information obtained about the disease was acceptable, but the safety precautions against the disease were weak.

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