ORIGINAL ARTICLE

Evaluation of quality of life and its related factors in diabetic patients in Tabriz medical centers

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Abstract

Introduction: Quality of life is one of the most important processes in the treatment of patients, so it is considered as the main issue in the care of diabetic patients. The aim of this study was to investigate the quality of life and its related factors in diabetic patients in Tabriz medical centers.

Materials: This descriptive-analytical study was performed on 131 patients with non-random sampling in the spring of the year 2021 in Tabriz medical centers. In order to collect the necessary information, two research questionnaires on demographic information and the quality of life questionnaire of Thomas et al. were used. SPSS software version 24 was used for data analysis.

Results: The quality of life of patients (56.03 ±4.35) is high among the subjects. In examining the relationship between the quality of life of diabetic patients with demographic variables: age, sex, occupation, and education was not statistically significant (P> 0.05), the average quality of life of diabetic patients among married people is higher than others. ; And this difference was statistically significant (P <0.05).

Conclusion: Considering the importance of quality of life in the treatment of these patients, it is hoped that more attention will be paid to this issue so that by planning treatment and care for patients, their quality of life can be improved.

Keywords: Diabetes, Quality of life, Diabetic patients.

Introduction

Diabetes is a harmful chronic disease characterized by abnormalities in the metabolism of carbohydrates, proteins, and fats. Diabetes has several symptoms. A person with diabetes does not produce or respond to insulin. As a result, high blood sugar occurs and a person suffers from short-term and long-term complications of diabetes (1). Today, the trend of diseases and mortality has changed in many countries of the world, and infectious and contagious diseases have given way to non-communicable and chronic diseases. Chronic diseases have become the leading cause of death in

many developed and developing countries, to the point that the mortality of these diseases in Asian countries is 2 to 5 times higher than infectious diseases (2). According to the latest available statistics, about 135 million people in the world suffer from this disease and it is estimated that this number will reach 300 million in 2025 (3). The prevalence of diabetes in Iran in 2000 is equal to 5.7 percent and according to forecasts, in 2025 it will be 6.8 percent (4). Quality of life is a multidimensional concept defined by the World Health Organization as each individual's understanding of life, values, goals, standards, and individual interests(5). The importance of quality of life is so great that if ignored it can lead to frustration, lack of motivation, reduced socio-economic-cultural and health activities, and in deeper dimensions, has a negative impact on the socio-economic development of the country. (6).

The concept of quality of life, which is used in various political, social, and economic fields, is often used in medical studies and, according to most experts, includes various physical, physiological, social, and spiritual dimensions (7).

According to the World Health Organization, quality of life is people's perception of their position in life in terms of culture, the value system in which they live, their goals, expectations, standards and priorities. Therefore, it is a completely subjective matter (8).
Therefore, in any biological disaster, symptoms such as fear, ambiguity in information and stigma are among the common phenomena that can act as an obstacle to the quality of life of people with the disease (9).

In medicine, quality of life is used in two ways: quality of public life, which examines public life, and quality of life related to health, which deals with the impact of various diseases on the physical, mental and social dimensions. Today, quality of life is an important issue and is considered as an important health outcome in the treatment and care of diabetic patients. Measuring the concept of quality of life and health status is used in health policies and determining the cost-effectiveness of treatment methods (11).

Diabetics have a lower quality of life than healthy people, but this outcome is better than that of patients with other chronic diseases. (12).

Studies have shown that diabetes can have negative effects on general health and well-being, in other words, on patients' quality of life (13).

Various researches have been done about the quality of life of people with diabetes. For example, in the study of the heir and colleagues, the results showed that the quality of life in 60% of diabetic patients is unsatisfactory, but in most healthy people it is reported to be desirable(14).

Also in a study conducted by Aristotle et al in Tehran with the aim of assessing the quality of life of diabetic elderly living in Kahrizak nursing home, the results showed that the average quality of life in the study population was 10.9 and the elderly male and elderly Married people had a higher quality of life (15).

The need to pay attention to the quality of life of diabetic patients is one of the treatment priorities of these patients today. The aim of this study was to investigate the quality of life and related factors in diabetic patients in Tabriz medical centers in order to identify the effective factors and the relationship of diabetes as a chronic disease and to improve the quality of life of these patients and more self-care measures.

Materials and Methods

This research is a descriptive-analytical study that was conducted in the spring of 2021 in the diabetic centers of Tabriz hospitals and was completed in late June 2021. The population of this study included patients of diabetic centers in Tabriz hospitals. 131 patients were selected by non-random sampling from the covered patients in the treatment centers. Inclusion criteria were: alertness and ability to respond, communicate, and complete satisfaction. To collect information, two research questionnaires were used, the first of which was about demographic information (gender, marital status, education, age of participants, and employment status) and the second questionnaire was the quality of life questionnaire of Thomas et al. This questionnaire has 15 questions and its purpose is to assess the quality of life of type 1 and type 2 diabetic patients. In the research of Adviser et al. (2012), the content validity and internal stability validity of this questionnaire were measured and confirmed. To evaluate the validity of the internal consistency of the questionnaire, the Spearman correlation coefficient was used between each question and the total score. Cronbach's alpha coefficient was also used to evaluate the reliability

of the questionnaire, which was 0.77. This number indicates the good reliability of this questionnaire. (16). after obtaining permission from the medical centers, the questionnaires were completed by the researchers for two weeks by interviewing each patient and all the questionnaires were answered. The scoring method of the questionnaire answers was based on the Likert 5-point scale, in which the highest score of 5 was given to the completely satisfied and the lowest score of 1 was given to the completely dissatisfied, and the mean scores were estimated. In order to analyze the collected data using questionnaires, SPSS software version 24 was used.

Results

In this study, 131 diabetic patients were studied. According to the results of Table (1), in terms of age, 25.2% of the total population is 40 years old, 45.8% are between 41 to 60 years old and 29% are over 60 years old. In terms of gender, 50.4% of the population are men and 49.6% of them are women. Table (1)

Table (1): Distribution of data related to personal characteristics

variable		Frequency	percentage
Gender	Man	66	50.4
	Female	65	49.6
marital status	Married	79	60.3
	Single	18	13.7
	divorced	23	17.6
	Widow	11	8.4
degree of education	High school	24	18.3
	Diploma	80	61.1
	bachelor and above	27	20.6
Age of participants	Under 40 years	33	25.2
	41-60	60	45.8
	Over 60 years	38	29
Employment status	Employed	61	46.6
	housewife	34	26
	Unemployed or retired	36	27.5

Table (2) shows the mean, standard deviation, skewness, maximum, minimum, and amplitude of changes of the dependent variable of the research subject. Quality of life variable of diabetic patients through surgery (summation of items related to its related dimensions, ie satisfaction with 7-item diabetes control and 8-item self-care behaviors),

which includes 15 items with a 5-part spectrum "from completely satisfied to completely dissatisfied" Has been. The average for this variable is 56.3 and its maximum is 68 and its minimum is 34. Also, the quality of life of patients (56.03 ±4.35) is high among the subjects.

Table (2): Descriptive statistics related to the quality of life variable of diabetic patients

variables	mean	standard deviation	skewness	maximum	Minimum	Maximum amplitude
Quality of life of diabetic patients	56.03	4.35	-0.65	6.8	34	34

The relationship between the quality of life of diabetic patients and demographic variables of age, sex, occupation, and education was not statistically significant (P <0.05). Statistically, the average quality of life of diabetic patients was higher among men than women (56.86); The average quality of life of diabetic patients is higher among people aged 40 to 61 (56.63); The average quality of life of diabetic patients is higher among people with higher

education level than other educated people (56.74); The average quality of life of diabetic patients is higher among employed people (56.69). According to Table (3), the average quality of life of diabetic patients is higher among married people; and this difference was statistically significant. This means that people who are married have a better quality of life. (0.05> P)

Table (3): Analysis of variance of marital status and quality of life of diabetic patients

	number	mean	quantity	degree of freedom	Significance level	Test results
Single	18	54.94				
Married	79	56.73	2.84	3	0.04	accepted
divorced	23	55.91				
Widow	11	53.09				

Discussion and conclusion

The findings of this study, which was performed on 131 diabetic patients in Tabriz medical centers, showed that the quality of life of patients is at a high level. In this regard, the results of the study of Abbaspour et al. also indicated that in 91% of the patients studied, the mean quality of life score was estimated to be 82.9 ± 2.16, which was at a good level, which is consistent with the findings of this study (17).

Meanwhile, Samadi et al. Reported in a study that the majority of patients with diabetes had a low quality of life, which is not consistent with the results of this study. It seems that the difference can be due to the difference in sample size, ie the sample size in the two studies have different generalizability. Also, the variables involved can be different, which has led to different results. (18).

The results of the present study indicated that the average quality of life of diabetic patients is higher among married people than others, which is a

statistically significant difference that is in line with the results of Bazrafshan research in Shiraz and Heitenen's in Finland. (19, 20).

In this study, no significant relationship was observed between job and quality of life, but the findings of Aghanouri's research showed that quality of life has a statistically significant relationship with employment status and economic status, which is not consistent with the results of this study. The variable proposed in the present study is job, but in the study of Aghanouri the economic situation has also been discussed. Also, the location of the two investigations and the different job status in the two places can be the cause of the difference. (21).

Based on the findings of this study, the average quality of life of diabetic patients is higher among employed people than others. Other research has shown that educated and employed people are involved in various social activities, and because more people in new environments, they are related, have wider relationships and social networks, and mainly receive social support from them, which can affect their quality of life (22).

The relationship between quality of life and education level in this study was not statistically significant, which is consistent with the findings of Glasgow et al., because, in his study, the relation between education level and quality of life was not statistically significant. It also shows that other important variables in the quality of life are involved other than the level of education (23).

The results of this study showed the high quality of life of patients. Individual-social factors such as age, occupation, income, etc. can affect the quality of life of patients. Considering the effect of controlling diabetes and optimizing the quality of life of patients, by recognizing the factors affecting the quality of life and also using personal, social, and economic information, it is possible to plan for

treatment and care of patients and improve their quality of life. The development of patients 'quality of life is a superior point in patients' recovery.

Ethical considerations

Researchers in order to protect human values and ethical principles of research, considered themselves obliged to observe ethical points. Justifying patients about the research and its objectives, observing the principle of confidentiality in disseminating information and keeping it confidential, freeing the research units from leaving the study and respecting the authors' rights in using the texts were among the ethical principles that were observed in this study.

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Conflicts of interest:

The authors declared that there is no conflict of interest.

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