Some Factors Affecting Quality of Life in Patients with Diabetes: a systematic Review

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ABSTRACT

Introduction: *Diabetes mellitus is considered as the most common disease caused by metabolic disorders. It is a syndrome of impaired production and insulin function. Regarding the chronicity of diabetes and its complications, it causes a lot of material burden on the patient and a decrease in the quality of life in them. Also, planning to increase the health of these patients requires studying on the barriers to their quality of life. Therefore, this systematic review was conducted to determine some factors affecting quality of Life in patients with diabetes.*

Materials and Methods: *The present study is a systematic review study They searched for articles in search engines, Magi ran, Google Scholar, Embassy, Science direct, Google Scholar, and Pub Med in Persian and English. Using the published articles in the last 20 years, it was about factors influencing the quality of life of patients with diabetes. In the first stage, 33 articles were found. Of these, 10 articles related to the topic that were published in the last 20 years were reviewed.*

Results: *Several studies have been conducted on the quality of life of diabetic patients. One of the studies studied in this study was a study aimed at determining the effect of self-management education on the quality of life of type II diabetic patients. And showed that the two groups were homogeneous in terms of demographic variables. The mean score of life quality before intervention was not significantly different between the two groups. But after the intervention, the mean score of quality of life between the two groups was significant.*

Conclusion: *It can be concluded that there is a significant relationship between some health-related quality of life scales and blood glucose profiles and higher quality of life may be associated with better control of blood glucose in diabetics. Also, according to the results of some studies, we can say the low quality of life in the majority of diabetic elderly and the role of complications of diabetes in its development; the results of this study show a high need for care in the elderly. And emphasize the role of care in improving the health of diabetic elderly people.*

Keywords: *Quality of Life, Diabetes, Diabetic Patients, Effective Factors, Risk Factor*

INTRODUCTION

Diabetes mellitus is one of the most common diseases caused by metabolic disorders. It is a syndrome of impaired production and insulin function.

Which led to an increase in uncontrolled outbreaks due to decreased physical activity and consumption of unhealthy foods (1-7)? And due to the increasing number of people affected by the disease, it has become a major public health problem in the world, especially in Asia. And it is also a major cause of death in the industrialized and developing world. Today, diabetes is one of the most important health and socio-economic problems in the world and there are many complications such as blindness, nephropathy, neuropathy and cardiovascular discomfort (8-14).In diabetic patients, depression is one of the most common psychiatric disorders (15). This disorder is one of the most common and debilitating problems for youth and adolescents.

(16, 17). Depression and occupational stress daily can cause some health disorders (18). High occupational stress is a known psychosocial factor in cardiovascular disease (19). Diabetes is one of the most common endocrine complications in thalassemic patients (20). This disease is a hereditary blood disease; the annual incidence of symptomatic cases of this disease is estimated at one hundred thousand people worldwide (21-23).In 2010, more than 4 million people were diagnosed with diabetes (24). Diabetes has affected the quality of life of the patients due to their chronic nature (25).

Regarding the chronicity of diabetes and its complications, it causes a lot of material burden on the patient and a decrease in the quality of life in them. Also, planning to increase the health of these patients requires studying on the barriers to their quality of life. Therefore, this systematic review was conducted to determine some factors affecting quality of Life in patients with diabetes.

MATERIALS AND METHODS

In order to achieve the goal of the study and to improve the accuracy of its study and its comprehension, this integrated overview study was conducted based on the Broome method. The purpose of this method was to achieve the purpose of the study and to enhance the study's thoroughness and comprehension. The method is based on three steps in the search of texts, data evaluation and data analysis. In the search phase of the texts, the studies after the retrieval were examined in terms of the criteria for entering the study in four stages.

After obtaining the terms of entry into the study, the content of the study is evaluated and at the end the analysis of the data was done. The present study is a systematic review study they searched for articles in search engines, Magi ran, Google Scholar, Embassy, Science direct, Google Scholar, and Pub Med in Persian and English. Using the published articles in the last 20 years, it was about factors influencing the quality of life of patients with diabetes. In the first stage, 33 articles were found. Of these, 10 articles related to the topic that were published in the last 20 years were reviewed. The studies studied were written in English or Persian, access to their full text was possible and they entered the study and unnamed studies were deleted without history and non-academic. To achieve relevant studies, a wide range of keywords including quality of life, diabetes, diabetic patients, influencing factors and risk factors was used as a one-to-one search, combined with the method "And" and "OR".

RESULTS

The results of a study that was done aimed at determining the factors affecting the quality of life of elderly people with diabetes, showed that Nonsense, organ anesthesia and visual impairment with the quality of public life and type of treatment, kidney failure, numbness, limb numbness and numbness, have a significant relationship with quality of life (26). Other study results showed in dependent variables (age, presence of informants in the family, breadwinner status, employment status and complications), It is associated with the dependent variable (physical function) and the variance of physical function is determined by the above variables, On the other hand, there is a significant correlation between age and physical function using Pearson correlation coefficient (27).

The findings of another study shows Pearson correlation findings indicated a significant relationship between self-care behaviors, quality of life and glycosylated hemoglobin in patients with type 2 diabetes. The findings were obtained from the simultaneous regression after age adjustment Self-care, 58% of the variance in quality of life and 40% of the variance of hemoglobin glycosylated can be explained (28).The results of other study that was done aimed to determine the effect of self-management education on the quality of life of type II diabetic patients showed that the two groups were homogeneous in terms of demographic variables. The mean score of life quality before intervention was not significantly different between the two groups. But after the intervention, the mean score of quality of life between the two groups was significant (29).

In the study, there was a positive and significant correlation between the ability of patients with all aspects of their quality of life. Also, there was a significant negative correlation between empowerment and patient age. There was a significant difference in the level of ability of patients according to variables of sex, marital status, type of life, education and income (30).A study was conducted to determine the quality of life and its effective factors in children with chronic diseases in Khalkhal city. There were significant relationships between factors such as nursing care and the level of education of the father with some aspects of the quality of life of children (31).In another study, the mean of

overall quality of life in the experimental group was significantly higher than the control group in the post-test and F was significant at the significant level. There was a significant difference between the two groups of test and control in terms of mean of all aspects of quality of life and the mean of all aspects of quality of life in the experimental group was increased compared to the control group (32).According to a study, there was a significant reverse relationship between the scores of general health scores with Fructosamine and glucose concentrations. So that the chance of increasing blood glucose in people with a higher general health score was 54% lower. Also, there was a significant reverse relationship between score scoring limit in role play due to physical problems with serum glucose concentration. In the case of insulin concentration, a significant reverse relationship was observed with score of physical activity scale (33).

According to some studies, most patients had a low level of self-concept and low quality of life. The results of Chi-Square test and Chi-Square Pearson correlation coefficient showed that there is a significant relationship between self-concept and quality of life in patients with type 2 diabetes (34).Results of other study showed there was a positive and significant relationship between self-management and diabetic knowledge with quality of life.

There was a negative and significant relationship between the duration of diabetes, depression, and glycosylated hemoglobin and diabetes complications. Duration of diabetes, self-management, diabetic knowledge, glycosylated hemoglobin, depression, diabetes complications and socioeconomic status significantly predicted changes in quality of life in patients with type 2 diabetes. Duration of diabetes was the highest in explaining quality of life (35).

DISCUSSION AND CONCLUSION

According to the results of some studies, we can say the low quality of life in the majority of diabetic elderly and the role of complications of diabetes in its development; the results of this study show a high need for care in the elderly. And emphasize the role of care in improving the health of diabetic elderly (26).According to some studies, it can be said in fact, changes in the quality of life dimensions are affected by individual, social and economic factors. And it can be concluded that measuring quality of life along with individual-background characteristics provides complete information for chronic patients. Finally, this information can be used to plan for the treatment and care of chronic patients and to improve their quality of life (27).

According to some studies, it can be said that Self-care in diabetes is a predictor of glycosylated hemoglobin levels and quality of life in patients with type 2 diabetes. The findings of the present study are aimed to focus on effective psychological factors in the prevention of complications of diabetes which can be the basis for conceptualizing, planning and designing health policies for the effective control of type 2 diabetes (28).The results of the study (29) indicated that improving the quality of life was followed by self-management education. Considering the important role of education in managing and controlling chronic diseases, including diabetes, it is recommended to use this type of education to achieve optimal quality of life.

According to study (30), we can say According to the results of this study, patients with a higher ability to have higher levels of quality of life in all aspects. It seems that nurses can help identify the influential factors in the ability and inclusion of training programs based on empowerment in the clinic to achieve a higher level of quality of life. According to study (31), it can be said that it seems the nursing care provided to these children is now satisfactory and can meet the goals. According to the results of the study (32), we can say that cognitive-mindedness therapy is effective in improving overall quality of life and physical and mental dimensions.

According to study (33), we can say there is a significant relationship between some health-related quality of life scales and blood glucose profiles and higher quality of life may be associated with better control of blood glucose in diabetics. According to the findings of the study (34), self-concept and quality of life are directly related. Therefore, it is possible to improve the quality of life of patients with type 2 diabetes and its upgrading, which improves the self-concept of these patients. In this way, the physical, psychological and psychological complications of this chronic disease should be prevented. According to study (35), this study showed that, duration of diabetes, self-management, diabetic knowledge, glycosylated hemoglobin, depression, diabetes complications and socioeconomic status are important in quality of life in type 2 diabetic patients.

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