EPIDEMIOLOGIC APPROACH TO QUALITY OF LIFE IN DIABETIC PATIENTS: A SYSTEMATIC REVIEW STUDY

Rezvan Feyzi1, Mostafa Madmoli2,3*

1Student of Public Health, Student Research Committee, Shoushtar Faculty of Medical Sciences, Shoushtar, Iran
2Emergency Medical Technician, Gerash University of Medical Sciences, Gerash, Iran*
3Emergency Medical Technician, Dezful University of Medical Sciences, Dezful, Iran

Article Info: Received 15 April 2019; Accepted 4 May 2019
Cite this article as: Feyzi, R., & Madmoli, M. (2019). EPIDEMIOLOGIC APPROACH TO QUALITY OF LIFE IN DIABETIC PATIENTS: A SYSTEMATIC REVIEW STUDY. International Journal of Medical and Biomedical Studies, 3(5).
DOI: https://doi.org/10.32553/ijmbs.v3i5.226
Address for Correspondence: Mostafa Madmoli, Emergency Medical Technician, Gerash University of Medical Sciences, Gerash, Iran
Conflict of interest: No conflict of interest.

Abstract

Introduction: Diabetes is a common disease with multiple complications that has an increasing trend and affects all aspects of the life of the patients, especially their quality of life. Therefore, considering 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. Considering that planning to increase the level of health of these patients requires studying on the barriers of their quality of life, this systematic review was conducted with the aim of determining the epidemiological approach to quality of life in diabetic patients.

Materials and Methods: In this systematic review study, 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.

Results: Several studies have been done on the quality of life of diabetic patients. One study that was conducted in this study was a study that showed a positive and significant correlation between patient's ability with all aspects of their quality of life. Also, there was a significant negative correlation between empowerment and patients age. There was a significant difference in the level of ability of patients according to gender, marital status, type of life, education and income.

Conclusion: According to the results of some studies, it can be said that the level of quality of life in the majority of diabetic elderly people is moderate, and 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. It is also necessary for these patients to be covered in order to receive educational, counseling, care and support services aimed at improving quality of life.

Keywords: Diabetes, quality of life, diabetic patients, epidemiologic approach

Introduction:

Chronic diseases, such as diabetes, are a health issue in new societies. Diabetes mellitus is a metabolic and multifactorial disease that results from a disorder of secretion or function of insulin, or both (1-4). Chronic hyperglycemia also causes degradation, dysfunction and insufficiency of various organs, especially the eyes, kidneys, nerves, and the heart and blood vessels (5-8). Diabetes will be the seventh cause of death in the world by 2030, and more than 80% of the deaths in the low and middle income countries will occur. Diabetes has grown significantly throughout the world, especially in developing
countries. Currently, 347 million people in the world suffer from this disease. Statistics show that in 2004, more than 3.4 million people died from diabetes complications (9-15).

In addition to the devastating effects on the body of the patient, the disease also has a widespread influence on their mental and social dimensions. Medical treatments, although they reduce the symptoms, have problems and problems that impair the patient's lifestyle (16). These disorders, which are caused by various aspects of the life of the person with diabetes, lead to negative effects on the quality of life of the individual due to the impossibility of a complete recovery and imminent death. Therefore, one of the important goals in the care of this type of patient is to improve the quality of life of the patient (17). Empirical studies have shown that quality of life can be considered as an indicator of the quality of health care and is part of the treatment plan, and its measurement in chronic illnesses provides planners with more information about the health status and disease. This information can also be considered useful as a useful guide to improving the quality of care (18).

The World Health Organization defines quality of life as a collection of individual perceptions of the status of their lives, according to the culture and value system of their community, and the relation between these receipts and their goals, expectations and priorities (19). And diabetes is a common illness with multiple complications that has an increasing trend and affects all aspects of the life of the patients, especially their quality of life. Therefore, considering 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. Considering that planning to increase the level of health of these patients requires studying on the barriers of their quality of life, this systematic review was conducted with the aim of determining the epidemiological approach to quality of life in diabetic patients.

Materials and Methods:
The present study is a systematic review article that was conducted in English and Persian by searching articles in search engines, authoritative sites and databases, Embase, Sciedirect, Google Scholar, PubMed. Using the published articles in the last 25 years, it was associated with an epidemiological approach to the quality of life of diabetic patients. In the first stage, 42 articles were found. Of these, 10 articles related to the topic published in the last 25 years were reviewed.

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 studies studied were written in English or Persian, access to their full text was possible, and entered the study, and unnamed and non-academic studies were deleted.

To achieve relevant studies, a wide range of keywords including diabetes, quality of life, diabetic patients, epidemiologic approach was used as a one-to-one search, combined with the method "And" and "OR".

Results:
Empirical studies have shown that quality of life can be considered as an indicator of the quality of health care and is part of the treatment plan, and its measurement in chronic illnesses provides planners with more information about the health status and disease. This information can also be considered useful as a useful guide to improving the quality of care (18). In this study, we reviewed ten articles that examine the quality of life of diabetic patients in an epidemiological fashion.

The results of the study on diabetic patients showed that organ anesthesia and visual impairment had a significant relationship with quality of life and type of treatment, renal failure, organ dysfunction and numbness with specific quality of life (20). Also, the results of another study showed that independent variables (age, presence of knowledgeable individuals in the family, breadwinner status, employment status and complications) were associated with the dependent variable (physical function), on the other hand, age and physical function, inverse correlation and meaning. There is a man (21). Other study findings also showed that there was a significant
relationship between self-care behaviors, quality of life and glycosylated hemoglobin in patients with type 2 diabetes. Findings from the simultaneous regression after age adjustment showed self-care, 58% of the variance in quality of life and 40% of the variance of glycosylated hemoglobin (22).

Other study results showed that mean score of life quality before intervention was not significantly different between the two groups, but after intervention, mean score of quality of life between the two groups was significantly different (23). Also, there was a positive and significant correlation between the ability of patients with all aspects of their quality of life in a study. Also, there was a significant negative correlation between empowerment and patients age. There was a significant difference in the level of ability of patients according to gender, marital status, type of life, education and income (24). Also, the results of a study that aimed to determine the quality of life and its effective factors in children showed that factors such as nursing care and the level of education of the father had a significant relationship with some aspects of the quality of life of children (25).

In the other study, the mean of overall quality of life in the experimental group was significantly higher than the control group in the post-test. There was a significant difference between the two experimental and control groups 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 (26). Also, a significant correlation was found between the scores of general health scores with fructosamine and glucose concentrations, so that the chance for blood glucose increase in subjects with a higher general health scores was 54% lower. In the case of insulin concentration, a significant reverse relationship was observed with the score of physical activity scale. Also, there was a significant reverse relationship between score scoring limit in role play due to physical problems with serum glucose concentration. (27).

According to some studies, most patients had a low level of self-concept and poor quality of life. There was a significant relationship between self-concept and quality of life in patients with type 2 diabetes (28). Also, the results of the study showed that there was a positive and significant relationship between self-management and diabetic knowledge with quality of life, and there was a negative and significant relationship between the duration of diabetes, depression, glycosylated hemoglobin and diabetes complications. Duration of diabetes, self-management, glycosylated hemoglobin, diabetes complications and socioeconomic status significantly predicted changes in quality of life in type 2 diabetic patients (29).

Discussion:
The World Health Organization defines quality of life as a collection of individual perceptions of the status of their lives, according to the culture and value system of their community, and the relation between these receipts and their goals, expectations and priorities (19). And diabetes is a common illness with multiple complications that has an increasing trend and affects all aspects of the life of the patients, especially their quality of life. Therefore, considering 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. Considering that planning to increase the level of health of these patients requires studying on the barriers of their quality of life, this systematic review was conducted with the aim of determining the epidemiological approach to quality of life in diabetic patients.

According to some studies (21), it can be said that measuring quality of life along with demographic characteristics provides comprehensive information for chronic patients, which can ultimately be used in the planning of health care for chronic patients and improve their quality of life. Also, according to some studies (22), self-care in diabetes is predictive 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 lead to the planning and design of health policies for more effective diabetes management. Also, the results of study (23) which showed that the mean score of life quality before intervention was not significant between the two groups, but after the intervention, the mean score of quality of life between the two groups was significant, it can be said with regard to the important role of education in managing and controlling chronic diseases such as diabetes, it is recommended to use this kind of education to achieve a better quality of life.
According to study (24), nurses may be able to help identify the influential factors in the ability and inclusion of training programs based on empowerment in the clinic in order to achieve a better level of quality of life. Also, according to a study (25), which showed that factors such as nursing care and the degree of education of a father had a significant relationship with some aspects of the quality of life of children, it would seem that nursing care that is currently offered to these children can be satisfied and can meet the desired goals. According to the results of the study (26), the mean of overall quality of life in the experimental group was significantly higher than the control group in the post test, and the mean of all dimensions of quality of life was significantly different between the two groups, and the mean of all aspects of quality Life in the experimental group was increased compared to the control group, it can be said that cognitive-based therapy is effective in improving the quality of life and physical and mental dimensions.

Also, according to study (29), it can be said that the duration of diabetes, self-management, diabetic knowledge, diabetes complications and socioeconomic status are important in the quality of life of people with diabetes.

Conclusion:
According to the results of some studies, it can be said that the level of quality of life in the majority of diabetic elderly people is moderate, and 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. It is also necessary for these patients to be covered in order to receive educational, counseling, care and support services aimed at improving quality of life.

Acknowledgment:
The authors of this article are grateful to all those who have collaborated with me in this article.

References:
Mostafa Madmoli *et al*, International Journal of Medical and Biomedical Studies (IJMBS)


