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# Relationships between Quality of Life, Anxiety, Depression and Diabetes

**Jolanta Lewko[1]* and Bianka Misiak[2]**
[1]Department of Integrated Medical Care, Medical University of Bialystok, Poland
[2]Department of Nursing, School of Medical Science in Bialystok, Poland

***Corresponding author:** Jolanta Lewko, Department of Integrated Medical Care, Medical University of Bialystok, 7A M. Skłodowskiej-Curie Str., 15-096 Bialystok, Poland, Tel: 4885 7485528; Email: jola.lewko@wp.pl

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**Abstract**

A chronic disease such as diabetes significantly affects the life of the individual and their family. It lowers quality of life, results in loss of physical strength and sense of safety, which in turn leads to a feeling of uselessness and the development of anxiety and depression. Diabetic patients with symptoms of depression have lower quality of life than patients with diabetes without depression. Lack of acceptance of a chronic disease such as diabetes also significantly reduces patient quality of life. Increased awareness and monitoring of cases of depression are needed in different areas of diabetes care, because among patients with diabetes who suffer from depression, neuropathy, retinopathy, pain, worse general health, and lack of social support occur more often than in patients with diabetes without depression. The patient's psychological well-being affects almost all aspects of therapeutic and nursing interventions.

**Keywords:** Diabetes; Quality of life; Anxiety; Depression

## Introduction

Diabetes is a chronic disease that significantly affects the life of the individual and their family. It lowers quality of life, physical strength, and sense of safety. This results in the inability to undertake any activity, which in turn leads to a feeling of uselessness and the development of depression and anxiety. Anxiety disorders and depression has been the subject of many studies conducted among patients with diabetes because of its association with large deficits in self-care in terms of glycemic control, lack of consistency in maintaining a diet and physical activity [1-3]. The aim of this study was characteristics of the relationship between the quality of life, anxiety, depression and diabetes and its complications.

## Material and Methods

A literature review was conducting using the electronic databases Pub Med, Google scholar. There were used the following key words: diabetes, quality of life, anxiety, depression. Publications written in English and Polish were included.

## Results

A patient's psychological well-being affects almost all aspects of therapeutic and nursing interventions, hence an important role of the therapeutic team is to develop the patient's sense of having an influence on their illness, and to develop and maintain a style of coping with diabetes oriented towards solving problems associated with the disease.

Thus, as suggested by Pietrzykowska et al. [4], assessing the quality of life of patients with diabetes should be a regular part of routine diabetes care, providing valuable information about potential problems in coping with the disease and helping develop and evaluate new therapeutic modalities.

It is believed that a balanced lifestyle and good quality of life are essential for the physical and psychological well-being of patients with diabetes.

Many studies have confirmed that diabetes patients had poorer quality of life [5,6] than patients with other serious chronic diseases [7]. The duration and type of diabetes were not closely linked with quality of life, but diabetes and its complications were important determinants of quality of life for patients with diabetes [7]. The occurrence of anxiety and depression in patients with type 2 diabetes statistically significantly reduced disease acceptance and quality of life in relation to health [8]. In addition to the disease itself, the factors that affect patient quality of life include demographic variables such as age, sex, or education. Men generally have better quality of life than women, and young people declare better quality of life than older people. Likewise, patients with a higher education and/or higher income evaluate their life better than those with a lower level of education and/or income.

Diabetes and its chronic complications usually involve extra costs and can worsen a family's financial situation.

Diabetes adversely affects patient psychological functioning, especially in terms of achieving personal goals and overall satisfaction with life [8].

Many patients with diabetes feel frustration, discouragement, and anger at a disease which despite their best efforts often gets out of control. Some patients feel helpless and depressed due to the possibility of chronic complication occurrence. Also, incorporating diabetes into their daily life can be an emotionally difficult task for many patients.

Diabetes affects psychological functioning but not in the same way in all patients. It was found that certain psychosocial factors, such as: health beliefs, social support, style of coping with stress, and personality traits, can have a direct or indirect impact on quality of life.


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It has been shown that personality traits can have more significance for perceived quality of life than the presence of comorbidities.

### Impact of diabetes on the occurrence of anxiety and depression

Recent studies concluded that depression occurs about twice as often in adult patients with type 1 or type 2 diabetes than in similar groups of adults without diabetes [9,10].

In a study that used the screening tool HADS (Hospital Anxiety and Depression Scale), anxiety symptoms were observed in 30.4% of patients, and depression in 32% [8]. Patients often or occasionally experience feelings similar to depression; they are associated with the necessity of living with a disease. This condition is sometimes referred to as diabetes-related distress, which is similar to depression but not severe enough to be diagnosed as depression [11]. Patients with diabetes with symptoms of depression have lower quality of life than patients with diabetes without depression [12]. The level of acceptance of a chronic disease such as diabetes also significantly reduces patient quality of life [12].

The study conducted by Georgiades et al. [13] demonstrated that depressive symptoms decreased significantly in both patients with Type 1 and Type 2 diabetes, whereas HbA1c and fasting glucose levels did not change significantly over time in either group. However Ciechanowski et al. [14] observed significant association between depressive symptoms and HbA1c levels in type 1, but not type 2 diabetic patients. Many studies suggest that effective treatment of depression can improve glycemic control, effective insulin treatment and other clinical parameters, and reduce the risk of cardiovascular system disease, and thus result in improved quality of life [15-18].

### Acceptance of a chronic disease

The consequences of lack of acceptance of a disease can be reduced to recognizing the limitations imposed by the disease, such as: a lack of self-sufficiency, a feeling of dependence on others, and decreased self-esteem [18].

Particularly in patients with diabetic polyneuropathy and in those who had had symptoms of anxiety and depression, it was found that they had more difficulty accepting their disease than patients without these complications [8].

Patients with a strong belief in self-efficacy and optimistic about life were also more satisfied with their doctor-patient relationship, showed more active behaviors of coping with stress, and had higher quality of life. A belief in self-efficacy and active coping behaviors seem to be the most important for the realization of basic objectives of treatment and self-care.

## Conclusion

Thorough and effective screening for depression in patients with diabetes will be subject to the start of treatment by psychiatrist. Increased awareness and monitoring of cases of depression are needed in different areas of diabetes care, because among the population of patients with diabetes who suffer from depression, neuropathy, retinopathy, pain, worse general health, and lack of social support occur more often than in patients with diabetes without depression. The patient's psychological well-being affects almost all aspects of therapeutic and nursing interventions.

Thus, an important role of the therapeutic team is to develop the patient's feeling of having an influence on their illness, and to develop and maintain a style of coping with diabetes oriented towards solving problems associated with the disease.

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