



PSYCHOLOGICAL ASPECTS OF DIABETES MELLITUS: THE INFLUENCE OF PSYCHO-EMOTIONAL FACTORS ON THE OCCURRENCE, COURSE AND COMPENSATION OF THE DISEASE

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Abstract

Diabetes mellitus is a chronic systemic disease in which psycho-emotional factors have a significant impact on the formation of the clinical picture, the dynamics of metabolic disorders and the patient's ability to maintain compensation for carbohydrate metabolism. The article examines in detail the personality traits of patients, emotional disorders, mechanisms of psychosomatic influence on the regulatory systems of the body, as well as specific reactions to the disease. Special Attention is paid to depressive and anxiety states, which are several times more common among diabetic patients compared to the healthy population and significantly worsen the prognosis of the disease. The mechanisms of psychological maladaptation, behavioral features associated with impaired self-regulation, which reduce motivation to comply with treatment, and the influence of alexithymia on the ability to perceive body signals, which makes it difficult to maintain compensation, are described. In the final part of the article, modern methods of psychological correction are considered, including psychotherapeutic strategies, emotional learning, cognitive behavioral approaches, methods for improving the quality of life and building a sustainable system of self-control.

Keywords: Diabetes, psychology, psychosomatics, depression, anxiety, personality, adaptation, self-control, motivation, quality of life.



Relevance of the topic

Diabetes mellitus refers to diseases that require constant participation from the patient, including daily control of glucose levels, diet, timely administration of insulin or taking pills, analysis of the body's reactions to various types of load and stress factors. The disease becomes not just a medical, but also a serious psychological problem, since it requires a restructuring of the usual lifestyle, a change in eating behavior, the formation of a new system of self-control and taking responsibility for one's own condition. These changes are accompanied by an emotional reaction, sometimes expressed quite sharply, especially when it comes to adolescents, young people or patients who are sensitive to restrictions. In recent decades, the attention of researchers has increasingly focused on the study of the psycho-emotional aspects of diabetes. It has been revealed that psychological disorders in this disease are not accidental, but have direct biological, behavioral and neuroendocrine mechanisms. For example, chronic stress stimulates the release of cortisol and adrenaline, which leads to an increase in blood glucose levels. In turn, an increase in glycemia worsens well-being, forming alarming symptoms and creating a vicious pathological circle. Further, emotional centers, motivation systems, hypothalamic-pituitary regulatory mechanisms and higher cognitive functions are involved in the process. The high relevance of the topic is also due to the fact that diabetes is often accompanied by depressive states. According to numerous studies, depression in diabetic patients is three to five times more common than in the general population. At the same time, a depressive state significantly worsens glycemic control, reduces adherence to treatment and accelerates the development of complications. This makes the psychological direction an obligatory part of the comprehensive management of the patient.

Problem description

The psychological problems that arise in patients with diabetes mellitus are multi-layered and deeply rooted in the structure of a person's personal and emotional functioning. This disease inevitably entails a restructuring of the patient's entire life, which leads to the formation of a complex set of experiences, internal



conflicts, emotional tension and stable changes in self-esteem, perception of the future and attitude to one's own body. Diabetes mellitus destroys the usual sense of stability and security, forcing a person to exist in a constant connection with the need for control, which provokes a high level of anxiety and emotional instability.

One of the most serious problems is the state of chronic psycho-emotional stress, which accompanies almost every patient from the moment of diagnosis. The diagnosis situation is often perceived as a blow that changes the idea of one's own life, plans and opportunities, forming shock, denial, distrust, a sense of defeat and loss of control. This stress develops into protracted internal tension, which leads to an increase in cortisol levels and a deterioration in general well-being, creating a threat of further decompensation of diabetes. Patients often complain of a feeling of constantly present anxiety, anticipation of worsening, doubts in their abilities, which creates a fertile ground for the formation of anxiety disorders.

An equally serious problem is chronic depression, which occurs in patients with diabetes mellitus much more often than among people without this disease. Depressive states form a loss of interest in life, a decrease in motivation for treatment, apathy, deterioration of concentration and memory. A person ceases to see the point in daily self-control, it becomes difficult for him to follow a diet, regimen, and doctor's recommendations. This leads to impaired glucose control, an increased risk of complications, which increases depression and forms a vicious circle that is difficult to get out of without professional help.

Among the significant psychological problems, persistent fears and irrational expectations stand out. Patients are afraid of sudden attacks of hypoglycemia, especially at night or in situations where help may not be available. This fear causes many to avoid active exertion, limit movement, skip insulin or intentionally increase sugar levels, which worsens the clinical course of the disease. The fear of complications is even more pronounced: many patients mentally replay possible scenarios of deterioration of the condition, up to amputations, loss of vision, kidney failure, heart attacks. Such constant internal tension weakens emotional stability, forms a tendency to catastrophizing and makes a person excessively vulnerable.



A special place in the structure of problems is occupied by the phenomenon of emotional burnout. Diabetes mellitus requires continuous attention: daily sugar measurements, carbohydrate accounting, meal planning, adherence to the regimen, the need for constant readiness to adjust treatment. All this leads to a gradual loss of emotional resources, increases irritability, causes a feeling of injustice and fatigue from one's own illness. A person begins to perceive treatment as a punishment, and not as a way to maintain health, which causes internal resistance and, as a result, worsening diabetes control.

A serious problem is also a violation of self-esteem. Patients with diabetes often perceive themselves as limited, weaker than others, and consider themselves inferior. This is especially true for young patients who face social restrictions, a sense of difference from their peers, fear of being misunderstood or rejected. A painful dependence on the opinion of others, increased attention to one's own shortcomings is formed, which leads to social isolation, a decrease in activity and a deterioration in the emotional background.

Difficulties in adapting to a new way of life are of great difficulty. Diabetes requires a change in eating habits, regimens, rejection of certain pleasures, and restructuring of the entire structure of everyday life. Many patients experience internal protest, unwillingness to accept new rules, which leads to a conflict between the need for treatment and the desire to maintain the previous lifestyle. This internal conflict becomes a source of constant tension, reduces adherence to therapy and causes a sense of guilt for one's own inadequacy.

Another important problem is the lack of emotional awareness characteristic of patients with alexithymia. These people poorly recognize their own emotions, cannot establish a connection between the internal state and the physical manifestations of the disease. As a result, stress responses remain misunderstood and unmanaged, leading to impaired glucose control and increased vulnerability to emotional overload.

An equally significant problem is social pressure. People around you often give unsolicited advice, express judgment or excessive sympathy, which increases the feeling of dependence. The family sometimes shows overprotectiveness, limiting



the patient's independence, which forms internal protest, irritation and a sense of helplessness.

Solving the problems of diabetes mellitus from a psychological point of view

Diabetes mellitus is a chronic disease that has a significant impact not only on the physical, but also on the psychological state of the patient. Effective solution of psychological problems in this disease requires an integrated approach, including both psychotherapeutic and educational, motivational and social measures. One of the key aspects is the organization of psychological support for patients, which includes individual and group consultations with a psychotherapist, training in methods of self-regulation and overcoming stress. Psychotherapy helps patients cope with the anxiety and depressive states that often occur in people with diabetes, especially during periods of sugar control, complications, or the need for strict dieting. Cognitive behavioral therapy plays an important role, which allows you to identify and correct destructive thoughts associated with the disease. Patients often experience feelings of guilt or anxiety when dietary rules are violated, and psychotherapy helps to transform negative attitudes into constructive and motivating ones, reducing emotional stress and improving quality of life.

Educational support is an integral part of solving problems related to psychological discomfort in patients. Lack of information about the disease, how to control glucose levels, proper nutrition and the use of medications is one of the causes of anxiety and a sense of helplessness. Training programs help patients gain the necessary knowledge and skills, build confidence in their actions and increase a sense of control over their own condition. At the same time, it is important that the training is practical and adapted to the individual characteristics of the patient, taking into account his lifestyle, level of education and social environment. Practical application of knowledge, for example, the correct calculation of carbohydrates, the ability to adjust the dose of insulin or choose suitable products, significantly reduces the psychological burden and increases the level of self-esteem of the patient.

One of the important areas is working with stress and emotional regulation. Stressful situations have a direct impact on blood sugar levels, increasing the



manifestations of the disease and complicating its control. Therefore, stress management methods, such as breathing practices, meditation, yoga, psychophysiological relaxation, are an effective tool for improving the psycho-emotional state of patients. The development of self-regulation skills, the ability to control emotional reactions and adapt to difficult situations reduce the risk of developing depressive and anxiety disorders, increase resistance to chronic stress associated with the constant need to control one's health.

Motivational support also plays a key role in solving the psychological problems of patients with diabetes. Patients often lose interest in following the diet and drug therapy, especially with a long course of the disease. The use of motivational techniques, such as motivational interviewing, allows the patient to independently identify personal goals and reasons for adhering to therapy. An important aspect is the creation of a reward system for compliance with the rules of treatment and the achievement of specific goals, which forms positive reinforcement and helps to strengthen internal motivation. Constant interaction with a psychologist and medical specialists helps patients realize the importance of their actions and feel supported by professionals.

Of particular importance is the prevention of depressive and anxiety in patients with diabetes. Regular monitoring of the mental state, the use of questionnaires and screening methods makes it possible to identify the initial manifestations of psychopathology in a timely manner and take measures to correct them. If necessary, the complex of treatment may include medications prescribed by a psychiatrist or psychotherapist, in combination with psychotherapeutic support. This comprehensive approach reduces the risk of progression of psychological problems and improves the overall quality of life of patients.

Modern technologies and digital tools are becoming an important part of solving psychological problems. Mobile applications, online consultations with psychologists and doctors, electronic diaries for monitoring sugar and nutrition allow the patient to track their indicators, receive prompt feedback and feel control over the disease. Having access to information and support at all times reduces anxiety, builds self-confidence, and promotes sustainable habits. This is



especially important for patients living in remote regions where access to medical facilities is limited.

Thus, the solution of psychological problems in diabetes mellitus requires an integrated approach, including psychotherapeutic support, educational programs, stress management methods, motivation, prevention of depression and anxiety, as well as the use of modern digital technologies. Only comprehensive attention to the psycho-emotional state of patients makes it possible to achieve sustainable control over the disease, improve the quality of life and reduce the risk of complications. Effective organization of these measures contributes to the formation of patients' self-confidence, independence and positive attitude to treatment, which ultimately affects the success of therapy and general health.

Conclusion

The psychological aspects of diabetes mellitus are crucial for the successful course of the disease and the formation of stable compensation for carbohydrate metabolism. Emotional disorders such as anxiety, depression, internal tension, insecurity, as well as personality traits and difficulties in self-regulation have a powerful impact on the patient's ability to follow recommendations and control their condition. The disease requires a high degree of responsibility, regularity and discipline, which does not always correspond to the natural characteristics of a person, especially in conditions of chronic stress and emotional exhaustion.

An integrated approach that includes psychological support, training, development of self-control skills, correction of emotional disorders and harmonization of the patient's relationship with his environment is a prerequisite for effective treatment. Psychotherapy, training programs, relaxation methods, increasing emotional awareness and working with internal motivation allow the patient not only to better control sugar levels, but also to improve the overall quality of life, perceive the disease more calmly and confidently, and build an adaptive and active attitude to their condition.

Thus, psychological help is an integral part of diabetes mellitus therapy. It helps to increase the effectiveness of medical treatment, reduces the risk of complications, strengthens the patient's internal resources and helps him achieve



sustainable compensation for the disease, which makes it an indispensable component of modern management of diabetes patients.

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