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PSYCHOLOGICAL AND SOCIAL ASPECTS OF THE LIFE OF YOUNG PEOPLE DIAGNOSED WITH DIABETES

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This article aims to provide a review of the risks associated with diabetes mellitus (DM) in young people, which contribute to the diabetes-specific distress, personal and interpersonal difficulties experienced by young people with diabetes since diagnosis, as well as the need to include psychologists in the multidisciplinary teams responsible for the care of people with diabetes. In this sense, we will present an analysis of the MEDLINE and PUBMED databases of the National Library of Medicine, in the USA. The diagnosis of DM presents a significant psychological burden, affecting individuals and families. Managing DM requires extensive lifestyle adjustments, often leading to depression, anxiety and emotional withdrawal. Despite the psychological challenges, psychological support is underutilized among DM patients. Recognizing the barriers to seeking help and advocating for multidisciplinary interventions are essential steps. The review underscores the urgent need for research and interventions aimed at enhancing the psychological well-being and quality of life of young people with DM.

Keywords: diabetes, distress, anxiety, depression, psychologist, interventions.

ASPECTE PSIHOLOGICE ȘI SOCIALE ALE VIETII TINERILOR DIAGNOSTICATI CU DIABET

Acest articol își propune să ofere o trecere în revistă a riscurilor asociate cu diabetul zaharat (DZ) la tineri, care contribuie la stresul specific diabetului, dificultățile personale și interpersonale cu care se confruntă tinerii cu diabet zaharat încă de la diagnosticare, precum și necesitatea de a include psihologi din echipele multidisciplinare responsabile cu îngrijirea persoanelor cu diabet. În acest sens, vom prezenta o analiză a bazelor de date MEDLINE și PUBMED ale Bibliotecii Naționale de Medicină din SUA. Diagnosticul de DZ reprezintă o povară psihologică semnificativă, afectând indivizii și familiile acestora. Gestionarea DM necesită ajustări extinse ale stilului de viață, ducând adesea la depresie, anxietate și retragere emoțională. În ciuda provocărilor psihologice, suportul psihologic este subutilizat în rândul pacienților cu DZ. Recunoașterea barierelor în calea căutării de ajutor și susținerea intervențiilor multidisciplinare sunt pași esențiali. Revizuirea subliniază nevoia urgentă de cercetări și intervenții menite să sporească bunăstarea psihologică și calitatea vieții tinerilor cu DZ.

Cuvinte-cheie: diabet, suferință, anxietate, depresie, psiholog, intervenții.

Introduction

The World Health Organization defines chronic conditions as those disorders characterized by a long duration, of at least three months, with symptoms of variable intensity and often having a progressive but slow evolution [19; 22]. Diabetes mellitus is one of the chronic medical conditions, which has an impact on the physical level, affecting the function of the pancreas, but which also affects the psychosocial aspects of life.

Diabetes is a serious chronic disease, associated with devastating effects both on an individual level, physically and psychologically, and on an economic level. Moreover, since 2011, diabetes has been included among the four non-communicable diseases that occupy a leading place on the list of priorities of world leaders [19, 22]. But despite this status, its incidence and prevalence continue to have a worryingly upward trajectory. The special feature of the 21st century is the diabetes pandemic. Regardless of the successes of clinical and experimental diabetology achieved in recent years, the prevalence and morbidity of diabetes continue to increase, according to the data of the World Health Organization [2, 11, 19].

Diabetes is a long-term disease that requires treatment, but also important changes in lifestyle.

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Healthy eating, physical exercise, giving up vices, following a schedule of the day are also a treatment for diabetes [2]. It is important to pay close attention to this condition because, in the absence of permanent control, the disease will evolve.

According to international statistics: every 11th person suffers from diabetes; one out of 2 people suffering from diabetes does not know that they are sick; every 7 seconds a person dies from diabetes; diabetes is the first cause of limb amputation; diabetes is the first cause of blindness (loss of vision); diabetes is the first cause of dialysis treatment; diabetes increases 2-4 times the occurrence of cardiovascular diseases. Although these data are worrying, the good news is that, in the situation where the person with diabetes is responsible, knows all the particularities of the disease and follows the recommendations of specialists in everyday life, the complications of diabetes can be avoided [2, 23, 24].

Diabetes is a disease with a significant psychological impact on patients, given that its management requires a significant reconfiguration of lifestyle and constant efforts to comply with medical procedures and indications indispensable to survive or reduce the risk of serious, irreversible complications - all of which with neither the prospect of healing, nor certain or immediately perceptible rewards to the person. Receiving the diagnosis of diabetes is a moment of reckoning for the person, and the news comes as a shock to both the patient and the family, regardless of the type of diabetes [5].

The management of diabetes mellitus (DM) requires both biological and psychological management, diabetes also brings a series of psychological difficulties that can disrupt the lives of individuals, behavioral and affective. Diabetes mellitus involves a daily set of self-care behaviors: insulin treatment is required before each meal and the dose of insulin is set in relation to the blood glucose value, but maintaining a good blood glucose value during the day can prove to be a tiring process, because there are many other factors that can influence this balance. Some of these factors can be controlled by sufferers, such as the number of carbohydrates consumed, the level of physical exertion performed that day, the time between meals, while other factors are difficult to manage [12; 18].

The main emotional difficulties associated with poor glycemic control in patients with DM are depression, anxiety, sadness and emotional withdrawal [15]. Even though these emotional difficulties may decrease after the first year after diagnosis, coping strategies developed during this time period may have an impact on later psychological development [10, 15, 17].

The complex interactions between psychological disorders and medical conditions is an ever-expanding field of interest that has attracted the attention of the world's institutions in the field of health psychology over time. Thus, the World Health Organization proposes a program to promote an integrated vision regarding the approach to psychological disorders in the case of diabetes [23].

Depression, whether major, moderate or mild, dysthymia and subclinical depressive symptoms, which occur without meeting the criteria for a psychiatric diagnosis, represent a risk factor in patients with diabetes in terms of diminishing the quality of life [4, 6, 8, 9]. People suffering from depression and anxiety are at increased risk of developing other conditions as well [23]. The association between anxiety and diabetes is not clarified in the specialized literature, but there are studies that indicate that in these patients the association of anxiety can lead to cardiac events and increase the risk of mortality [1].

Psychosocial support has an important impact in managing anxiety and can reduce anxiety in people with diabetes. According to scholars, social support in stressful life situations is associated with lower levels of depression and psychological distress [10, 18]. Loneliness, the feeling of loneliness, is a predictor of the incidence of depressive events, even when variables such as demographic, behavioral and biological risk factors, depressive symptoms, and the number of friends and family members are controlled, as shown in a longitudinal study by over 19 years by Thurston and Kubzansk, 2009. In addition, life situations that can cause chronic major stress can contribute to the erosion of social relationships [2, 7, 17].

Diabetes mellitus can represent an important stressor in itself, but especially when associated with psychological conditions or other stressors of a psychosocial nature. Therefore, the investigation of the support group and possibly the approach of this theme in the psychological intervention may represent important objectives in the assessment and counseling of patients with diabetes [18].

Also, personal factors that act as impediments to effective diabetes management when negatively va-

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lence include: knowledge about the disease and treatment, feeling empowered in the treatment of one's disease, health literacy, motivation, cognitions about health, self-efficacy, coping and problem-solving skills, locus of control, depression, anxiety, forgetfulness, alcohol abuse, other health issues that may influence diabetes management [17, 18].

While environmental factors that interfere with self-care of the disease include: social support, factors related to the quality of services received, socio-economic aspects, distance to health care centers, other competing responsibilities and duties, factors related to the availability of quality medical options, access to healthy food, the opportunity to exercise, etc. [3, 8].

Evidence from the literature shows that living with diabetes during youth is not a linear experience, and the voices of young people can inform researchers to develop evidence-based, personalized interventions to help them achieve better emotional and metabolic control [3, 10, 11].

Objective

Evaluation and analysis of the available literature dedicated to psychological and social problems in young people with diabetes.

Material and methods

PUBMED and MEDLINE search were performed to select the works available from the last 10 years based on the keywords: diabetes, affective status, distress, anxiety, depression in Romanian, English, French and Russian languages. Multiple scientific sources were found, from which 50 selected scientific papers presented a value for the given review.

Results

Diabetes and hyperglycemia are among the most important elements responsible for the increased incidence of mortality and morbidity worldwide, thus we recall one of the statements of the International Diabetes Federation (IDF): "diabetes is one of the major health emergencies of the 21st century worldwide" [2].

Research in recent years is bringing increasingly clear data on the connection between diabetes and affective disorders.

The metabolic disturbances expressed in diabetes mellitus (DM) lead to pathological changes in many systems and organs, but also have a profound psychological and social impact [3, 5, 8]. However, unlike the clinical picture of the condition, the depth of psychological disturbances in diabetes is very little studied and elucidated in the contemporary literature. There is a need for an in-depth view of what it means to live with DM in young people, focusing on the various psychological and relational factors that impact on the day-to-day management of diabetes. The results of the studies in this summary article add to the limited base of specialized studies from the Romanian context [6, 7, 8, 16].

Starting from the end of the 19th century, with the development of modern psychology, the biomedical model, according to which somatic diseases are exclusively associated with disturbances in the biological plane, began to lose its power. Currently, thanks to the contributions from psychology, the preference for the biopsychosocial model dominates, which brings to the fore the idea that health is an objective that can be achieved when attention is paid to all the functioning plans of the individual [3, 4, 22]. Diabetes is a very suggestive example of what the biopsychosocial model means and how it can be used to the advantage of patients and the general population, and the close connection between the biological, psychological and social levels is manifested both in the etiology of diabetes and during the life of patients [3].

On the other hand, diabetes, right from the moment of diagnosis, tends to be a real burden both for patients and for the people close to them. According to some authors, the diagnosis is experienced as a sentence to a life threatened by multiple irreversible and disabling medical complications and made difficult by constant efforts to manage the disease and keep the associated risks under control [2, 4, 7].

Together with the problems given by the obligation to precisely follow a complicated treatment and the sentence of living with an incurable disease, diabetes brings a series of psychological difficulties that can significantly disrupt the lives of patients on a personal, professional, social and family level. Moreover,

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depression and emotional distress are common in patients with diabetes [6, 9, 15] and is associated not only with an impairment of their quality of life [2, 4], but also with poor disease management [2, 4, 13].

Diabetes can strongly interfere in patients' lives, on several levels: professional, social, at the level of family relationships. Along with the diagnosis, the person also receives the label of "diabetic", and this brings with it a series of social, legal and life implications for individuals [5]. Stigmatization of patients with diabetes seems to be quite a serious problem, but undetected and researched [17]. Although people without diabetes generally believe that the disease is not a cause of social stigma, many patients with diabetes report that there are many contexts in which negative social evaluations affect their lives at work, from studies, in interpersonal relations, etc. [8, 12].

From a practical point of view, the quality of life of people suffering from chronic conditions was and is the subject of interdisciplinary research extremely important for the global therapeutic approach. The term "quality of life" refers to the subjective perceptions of both the patient and the specialists in the field, it is a reflection of the individual's ability to adapt to the new evolutionary conditions of the chronic disease [20].

In recent years, many studies have tried to quantify the changes in the quality of life of patients with diabetes, unfortunately, most of them were carried out on non-homogeneous therapeutic groups of patients, with the application of different methods of tracking the effect achieved in relation to the therapeutic gesture practiced [20]. Measuring the quality of life is difficult, problematic and constitutes a complex, dynamic collection of objective and subjective, social and individual, positive and negative, continuously interacting dimensions [24].

It should be mentioned that, currently, the real impact of diabetes on the patient's quality of life, its correlation with the type of diabetes, the severity and the rate of complications is insufficiently investigated. In this context, it is necessary to carry out an analysis with quantitative and qualitative interpretation of the implications of the diagnosis and treatment on the state of health and on the level of quality of life, of the degree of psychological and social adaptation in different types of diabetes. Through the research of the domestic specialized literature, the proportion of scientific works that address the quality of life of patients with diabetes proved to be very small and sporadic in nature. Evaluation studies of the quality of life are needed with the help of specific questionnaires devoted to diabetes, able, along the different stages of treatment, to provide a complex picture of the patient's perception of his own state of health.

The lack of such tools has so far limited the development of specialized services in the Republic of Moldova, because the results of specialized studies abroad cannot be extrapolated to our case study. Thus, with reference to the problem presented, there is an imminent need to develop, translate and adapt the Romanian version of some specific questionnaires for evaluating the degree to which diabetes and the therapeutic process influence the patient's quality of life. The evaluation of the quality of life is also important when we refer to the time monitoring of the evolution of diabetes.

The quality of life of patients with diabetes (DM) is affected by a multitude of factors. From this point of view, the medical complications that patients often develop due to diabetes (DM) represent one of the greatest threats to quality of life [4; 8; 14]. Specific predictors for a reduced quality of life are older age, female gender, a reduced socioeconomic status, the existence of health problems such as cardiovascular disease, microvascular complications, congestive heart failure, peripheral vascular disease, chronic lung disease; the presence of depression; use of insulin; the number of drugs included in the treatment plan, etc. [2, 19].

Despite these contradictions, regardless of which variable makes the greatest contribution to adherence to desirable diabetes management behaviors, both diabetes-specific distress, depressive symptoms and pathologically severe depression require specific, differentiated attention and treatment [2].

What seems to matter more is the ability to correctly identify what the problem is in order to apply the right therapeutic strategies and techniques. And both dimensions of the problem – assessment and appropriate therapeutic recommendations – require the presence of a clinical psychologist in the multidisciplinary team responsible for the care of patients with diabetes [12, 18].

The inclusion of psychological services in the care package for people diagnosed with diabetes is consistently accepted and encouraged among professionals [2, 19], and the effectiveness of psychological interventions in support of these people is scientifically supported [13, 17, 18].

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Although the obvious benefits of an extensive interdisciplinary approach to the treatment of the diabetic patient have been demonstrated, there are still numerous barriers to the integration of all methods of treatment of affective disorders [18]. Extensive future studies are needed to identify the full range of emotional problems associated with diabetes and chronic complications, as well as methods of prevention. In this context, the importance of the psychologist in the diabetes patient care team is emphasized again [2, 24].

However, few people with diabetes end up seeking psychological help even if they need it [18], and in the Republic of Moldova, based on empirical observations, it can be said that assessment and psychological support do not seem to be a rule in the care scheme long term of these patients. Moreover, access to psychological intervention services seems to be still sub-optimal, although some improvement could be noted over time.

Seeking psychological support tends to be hampered by a multitude of psychosocial factors such as social stigma, social norms, fears associated with therapy, fear of getting in touch with one's own emotions, avoidance of self-disclosure, negative expectations about the usefulness and risks of working with a psychologist or self-esteem, not only by objective conditions such as the lack of medical insurance to cover the costs [19, 24].

In the case of the care of patients with diabetes, regardless of their age, it is found that interventions on several levels, delivered by multidisciplinary teams that also contain specialists with training in psychology, are encouraged more and more [8, 10, 13, 17, 18]. In addition, the American Diabetes Association includes psychological testing and intervention on the list of standards of primary care for patients with diabetes and formulates a series of recommendations for the identification and management of psychosocial difficulties specific to diabetes [2, 24].

Conclusions

The results obtained, through the use of an analytical tool, allowed us to highlight the problematic aspects of the lives of young people diagnosed with diabetes, raising the awareness of the scientific community on a current topic.

Diabetes mellitus (DM) is a disease with a significant psychological impact on young people, given that its management requires a significant reconfiguration of lifestyle and constant efforts to comply with the procedures and medical indications indispensable to survive or reduce the risk of serious complications, irremediable – all this without the prospect of healing, nor certain rewards or easily perceptible by the person. Receiving the diagnosis of diabetes is a moment of balance for the person, and the news comes as a shock for both the patient and the family, regardless of the type of diabetes.

Diabetes mellitus (DM) is a very suggestive example of what the biopsychosocial model means and how it can be used to the advantage of patients and the general population. The close connection between the biological, psychological and social level is manifested both in the etiology of diabetes and during the life of the patients. The study results in this article add to the limited body of research that highlights diabetes in the young is not a linear experience.

The inclusion of psychological services in the package of measures for the care of people diagnosed with diabetes is consistently accepted and encouraged among professionals, and the effectiveness of psychological interventions in support of these patients needs to be scientifically supported.

In this context, both understanding the reasons why some patients with diabetes encounter difficulties in seeking psychological help and finding measures to remove the barriers between patients with diabetes and psychologists become as important as identifying successful therapeutic strategies and techniques.

Educating the community, in the direction of highlighting the usefulness of psychological services in assisting patients with diabetes and increasing doctor-patient-psychologist collaboration, strengthening the behaviors of seeking psychological support, become equally important.

Taking into account all this, we encourage the realization of some research efforts, in the direction of highlighting the usefulness of psychological services in assisting young people with diabetes and increasing their quality of life.

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References:

- 1. ALI, S., STONE, M. A., PETERS, J. L., DAVIES, M. J., & KHUNTI, K. *The prevalence of comorbid depression in adults with type 2 diabetes: A systematic review and meta-analysis*. In: *Diabetic Medicine*, nr. 23, 11, 2006, pp. 1165–1173.
- 2. AMERICAN DIABETES ASSOCIATION. *Lifestyle management*. In: *Diabetes Care*, nr. 40, Suppl. 1, 2017, pp. 33–43.
- 3. ASHRAFF, S., SIDDIQUI, M. A., & CARLINE, T., E. *The psychosocial impact of diabetes in adolescents: a review*. In: *Oman Medical Journal*, nr. 28(3), 2013, pp.159-162.
- 4. BĂDESCU, S. V., TĂTARU, C, KOBYLINSKA, L., GEORGESCU, E. L., ZAHIU, D. M., ZAGREAN, A. M., & ZĂGREAN, L. *The association between diabetes mellitus and depression*. In: *Medical Life*, nr. 9(2), 2016, pp. 120–125.
- 5. BARENDSE, S., SINGH, H., FRIER, B. M., & SPEIGHT, J. The impact of hypoglycaemia on quality of life and related patient-reported outcomes in type 2 diabetes: A narrative review. In: Diabetic Medicine, nr. 29, 3, 2012, pp. 293–302.
- 6. BARNARD, K. D., SKINNER, T. C., & PEVELER, R. *The prevalence of co-morbid depression in adults with type 1 diabetes: Systematic literature review.* In: *Diabetic Medicine*, nr. 23, 4, 2006, pp. 445–448.
- 7. BOGATEAN POP, M. & HÂNCU, N. People with type 2 diabetes facing the reality of starting insulin therapy: factors involved in psychological insulin resistance. In: Practical Diabetes International, nr. 21(7), 2014, pp. 247–252.
- 8. BONARDI, A., CALLUS, E., ROMAGNONI, C. Social support, depression, and heartdisease: a ten year literature view. In: Frontiers in Psychology, nr. 4, 2013, 384 p.
- 9. DANTZER, C., SWENDSEN, J., MAURICE-TISON, S., & SALAMON, R. Anxiety and depression in juvenile diabetes: a critical review. In: Clinical Psychology Review, nr. 23, 2013, pp. 787–800.
- 10. DELAMATER, A. M. *Psychological care of children and adolescents with diabetes*. In: *Pediatric Diabetes*, nr. 10, s12, 2009, pp. 175–184.
- 11. DOVEY-PEARCE, G., & CHRISTIE, D. Transition in diabetes: young people move on—we should too. In: *Journal of Paediatric Child Health*, nr. 23(4), 2013, pp. 174-179.
- 12. HARVEY, J., N. *Psychosocial interventions for the diabetic patient*. In: *Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy*, nr. 8, 2015, pp. 29–43.
- 13. HILLIARD, M. E., POWELL, P. W., & ANDERSON, B. J. Evidence-based behavioral interventions to promote diabetes management in children, adolescents, and families. In: American Psychology, nr. 71(7), 2016, pp. 590-601.
- 14. HUSSAIN, T., AKLE, M., NAGELKERKE, N., & DEEB, A. Comparative study on treatment satisfaction and health perception in children and adolescents with type 1 diabetes mellitus on multiple daily injection of insulin, insulin pump and sensor-augmented pump therapy. In: SAGE Open Med, nr. 23(5), 2017.
- 15. NORTHAM, E. A., MATTHEWS, L. K., ANDERSON, P. J., CAMERON, F. J., & WERTHER, G. A. *Psychiatric morbidity and health outcome in type 1 diabetes: perspectives from a prospective longitudinal study.* In: *Diabetes Medical*, nr. 22, 2015, pp. 152–157.
- 16. SERBAN, V., BRINK, S., TIMAR, B., SIMA, A., VLAD, M., & TIMAR, R. An increasing incidence of type 1 diabetes mellitus in Romanian children aged 0 to 17 years. In: Journal of Pediatric Endocrinology & Metabolism, nr. 8, 2015, pp. 293-298.
- 17. SKINNER, T. C., WHITE, J., JOHNSTON, C., & HIXENBAUGH, P. Interaction between social support & injection regimen in predicting teenagers' concurrent glycosylated hemoglobin assays. In: Journal of Diabetes Nursing, nr. 3, pp. 140-144.
- 18. SNOEK, F. J., & SKINNER, T. C. Psychological counselling in problematic diabetes: Does it help? In: Diabetic Medicine, nr. 19(4), pp. 265-73.
- 19. VON SENGBUSCH S., MÜLLER-GODEFFROY E., HÄGER S., REINTJES R., HIORT O., WAGNER W. Mobile diabetes education and care: intervention for children and young people with Type 1 diabetes in rural areas of northern Germany, Diabetic Medicine, Volume 23,
- 20. WEXLER, D. J., GRANT, R. W., WITTENBERG, E., BOSCH, J. L., CAGLIERO, E., DELAHANTY, L., ... & MEIGS, J. B., Correlates of health-related quality of life in type 2 diabetes, Diabetologia, 49, 7, 2006, p. 1489–1497.

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- 21. WHITTEMORE, R., JASER, S., CHAO, A., JANG, M., & GREY, M., Psychological experience of parents of children with type 1 diabetes. A systematic mixed-studies review, The Diabetes Educator, 38, 4, 2012, p. 562–579.
- 22. WORLD HEALTH ORGANIZATION, CALOUSTE GULBENKIAN FOUNDATION. *Integrating the response to mental disorders and other chronic diseases in health care systems*. Geneva: World Health Organization, 2014.
- 23. WORLD HEALTH ORGANIZATION. Global report on diabetes, 2016.
- 24. WORLD HEALTH ORGANIZATION, CALOUSTE GULBENKIAN FOUNDATION. *Integrating the response to mental disorders and other chronic diseases in health care systems*, Geneva: World Health Organization, 2014.

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