

THE RELATIONSHIP OF SYMPTOMS OF ANXIETY AND DEPRESSION IN PEOPLE WITH TYPE 1 AND 2 DIABETES MELLITUS: AN INTEGRATIVE REVIEW

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Abstract: Objective: The focus of this study is the emotional repercussions of living with Diabetes Mellitus in the lives of individuals diagnosed with the disease. Identify psychopathological symptoms of the person who received the diagnosis and discuss the emotional repercussion of the diagnosis on the subject's life story. Method: This is an integrative review of the literature, research was carried out using databases available in the Virtual Health Library (VHL), Medical Literature Analysis and Retrieval System Online (MEDLINE), National Library of Medicine/PubMed, SciELO. The descriptors used were: Diabetes Mellitus, Depression, Anxiety, Anxiety, Depression. Combined with the Boolean operators OR / AND. Results: Of the articles selected, the majority were cross-sectional. Articles with research on populations in America and Europe. Among the factors associated with depression and anxiety in people diagnosed with diabetes, studies have linked to a greater predominance in females, accompanied by advanced age, complications related to the disease and poor glycemic control. Regarding complications associated with diabetes, peripheral neuropathy, retinopathy and hypertension were mentioned in the studies. In the studies, scales and instruments were used to verify the prevalence and recurrence of anxiety and depression in patients, among them the instrument most mentioned in the studies was the Hospital Anxiety and Depression Scale (HADS). Conclusion: Greater training of the multidisciplinary team is necessary so that care can be carried out in order to prevent or alleviate the magnitude of this problem, thus requiring professional action that is based on the principles of humanization and comprehensiveness in care.

Keywords: Diabetes Mellitus; Anxiety; Depression; Chronic disease.

INTRODUCTION

Diabetes is a disease caused by insufficient production or poor absorption of insulin, a hormone that regulates blood glucose. Insulin deficiency in the body can cause an increase in blood glucose levels and high levels can lead to complications in the heart, arteries, eyes, kidneys and nerves. If diabetes is not taken care of properly, it can lead to death (BRASIL, 2023).

According to data, Brazil is the 5th country with the highest incidence of diabetes in the world, with around 16.8 million adult patients between 20 and 79 years old. With an estimate for the incidence of the disease in 2030 to be 21.5 million. (INTERNATIONAL DIABETES FEDERATION, 2021)

According to (Ferreira et al., 2013) when receiving the diagnosis of a chronic disease, which, if you realize that you will live with the disease for your entire life, it becomes essential to be aware of the self-care of coping that will be carried out. From then on, adaptation to new methods of living, and insecurity due to the unknown future, can trigger psychopathological changes such as: depression and anxiety.

Depression is a mental illness, which becomes chronic and recurrent when there is no efficient treatment, which can be medication or psychotherapy. Symptoms are generally: Depressive mood, difficulties perceived as insurmountable, generally decreased appetite, and increased appetite may also occur, with greater interest in carbohydrates and sweets. (PAHO, 2020)

A study presented to the Department of Medicine and Endocrinology, evaluated the Hamilton Depression Rating Scale (HAM-D) for depression and the Hamilton Anxiety Rating Scale (HAM-A) for anxiety, in fifty patients diagnosed with type diabetes. I and type II diabetes. 39% of those evaluated had anxiety and 40% were diagnosed with depression. (CHAUDHARY, 2017).

Even though there is a significant number of people with diabetes who are diagnosed with depression or suffering related to diabetes, a large portion of diabetics remain undiagnosed and untreated (MUKHERJEE, SANTOSH, 2019).

Clinical studies highlight that people with diabetes have a greater predisposition to depression. Depression can end up harming good glycemic control, as the patient, upon realizing that they do not have glycemic control, becomes convinced that they have lost “control of the disease”, causing psychopathological symptoms, becoming a vicious cycle. (SBD-SOCIEDADE BRAZILIAN DIABETES)

A study was carried out at the Nursing Educational Center for Adults and Elderly with the objective of identifying the difficulties of diabetic patients in relation to treatment for good control of the disease, where 24 diabetic patients participated. In its results, difficulties related to following the treatment were reported, with rejection and denial of the patient's condition, revolt due to the restrictions imposed on food, physical activities and administration of medication, and suffering. (PÉRES, 2007).

To analyze population information on the prevalence of psychopathological symptoms of depression and anxiety in patients diagnosed with type 1 and 2 diabetes mellitus.

METHOD

This is an integrative review of the literature on anxiety and depression in people with Type 1 and 2 Diabetes Mellitus.

For its elaboration, the steps proposed by Mendes, Silveira and Galvão were followed: formulation of the theme, establishment of criteria for inclusion and exclusion of studies, definition of information to be extracted from selected studies, evaluation of studies, interpretation of results and synthesis of the knowledge.

In formulating the present study, the following guiding question was created: What is the relationship between psychopathological symptoms and patients diagnosed with Diabetes Mellitus? To prepare the guiding question, the PICO strategy was used, an acronym for P: Problem or target population; I: Intervention or phenomenon of interest; Co: Context.

ACRONYM	DESCRIPTORS
P	Type I and II diabetes patients
I	Therapy
Co	Depression/Anxiety in diabetics

Searches were carried out using databases available in the Virtual Health Library (VHL), Medical Literature Analysis and Retrieval System Online (MEDLINE), National Library of Medicine/PubMed, SciELO.

The descriptors used were: Diabetes Mellitus, Depression, Anxiety, Anxiety, Depression. Combined with the Boolean operators OR / AND. To establish criteria for inclusion and exclusion of studies, articles that did not meet the topic discussed were discarded, as well as course completion works, theses and dissertations. To select the articles, articles were read through the databases and 6 articles were selected for study. At the end of the study, the knowledge synthesis stage was carried out, in which the main results of the analysis of the articles included in the study were studied.

RESULTS

Of the selected articles, the majority were cross-sectional. Articles with research on populations in America and Europe. Among the factors associated with depression and anxiety in people diagnosed with diabetes, studies have linked to a greater predominance in females, accompanied by advanced age, complications related to the disease and poor

glycemic control. Regarding complications associated with diabetes, peripheral neuropathy, retinopathy and hypertension were mentioned in the studies.

In the studies, scales and instruments were used to verify the prevalence and recurrence of anxiety and depression in patients, among them the instrument most mentioned in the studies was the Hospital Anxiety and Depression Scale (HADS), despite the HADS being considered an effective instrument in Assessment of depressive symptoms in hospital environments is a screening measure, and it is extremely important to be followed by a psychological assessment.

Records identified in Databases/ Libraries/
Search Engines (n=50 publications)

Registration after removing duplicates and
reading titles and abstracts (n=21 publications)

Full articles assessed for eligibility (n=14
publications)

Studies Included (n=6)

Figure 1: Process of identification, selection, eligibility and inclusion of articles

Source: Written by the author

IDENTIFICATION	PREVALENCE IN THE SAMPLE
E1	Of the 144 individuals studied, 109 (75.7%) elderly people did not present depressive symptoms, while 35 (24.3%) exhibited such symptoms. (N=144)
E2	
E3	1,223 individuals studied, 471 (38.5%) reported some symptoms of depression
E4	2,049 people studied with type 1 and 2 diabetes, high levels of anxiety and depression symptoms in patients with diabetes; 32.0% exceeded the 'mild to severe' HADS anxiety cut-off score and 22.4%
E5	People Embarrassment for having diabetes (64.0%), 37. Being called diabetic (70.7)
E6	6 people studied, after a year and a half of intervention, the participants' level of anxiety went from mild to minimal.

Table 2: Synthesis of information extracted from selected articles

Source: The author

IDENTIFICATION	ARTICLE	AUTHOR	STUDY LOCATION, YEAR	OBJECTIVE
E1	Factors related to symptoms depression in elderly people with diabetes mellitus	Erica Maria, Cláudia Jeane, Gerlania Rodrigues, Maria Cristina	72 Health Units in Family (USF) of João Pessoa, Paraíba, Brazil 2019	Identify factors related to depressive symptoms in elderly people with diabetes mellitus.
E2	PSYCHOLOGICAL ASPECTS OF PEOPLE WHO SUFFER FROM DIABETES MELLITUS	Fernando Oliveira Pereira	Lisboa, 2020	Study of psychological and psychosocial aspects in people with diabetes mellitus.
E3	DEPRESSION IN PATIENTS WITH DIABETES: DOES IT AFFECT THE CLINICAL OBJECTIVES?	William A. Rush, Robin R. Whitebird, Monica R. Rush, Leifl; Solberg, Patrick J. O'Connor	Minnesota, 2001	To examine whether depressive symptoms are associated with achieving recommended goals for glucose, lipid, and blood pressure control in patients with diabetes.
E4	Symptoms of anxiety and depression in patients with diabetes	MM Collins, P. Corcoran, IJ Perry	Irlanda, 2008	Identify the prevalence and main determinants of anxiety symptoms and depression in patients with diabetes
E5	QUALITY OF LIFE OF PATIENTS WITH DIABETES USING THE DIABETES 39 INSTRUMENT (D-39)	Luana Rosas, Manoel Antônio, Vivian Saraiva, Flávia Fernanda, Clarissa Cordeiro, Maria Lúcia,	São Paulo, Brasil 2012	This study aimed to investigate the quality of specific life of patients with Diabetes Mellitus.
E6	ANXIETY REDUCTION WITH DIABETIC GROUP: PHYSICAL AND PSYCHOLOGICAL INTERFACES OF AN INTERVENTION	Jessica Maires; Anderson Meireles; Tatiana Bahia; Maíra Aparecida; Marcos Vieira; Maria Nivalda; Andréa Carmen;	Minas Gerais, Brasil 2016	The objective was to verify whether the interventions carried out would have an impact on reducing anxiety

Table 1: Synthesis of information extracted from selected articles

DISCUSSION

In the results of these selected studies, the prevalence of anxiety and/or depression in people with type 1 and 2 Diabetes Mellitus is notable, when compared with the general population.

In study E1, 144 individuals with diabetes mellitus over 60 years of age were studied. The studies demonstrated that 24.3% of study participants had depressive symptoms, and it was also found that such symptoms were more recurrent in individuals who had some complication of the disease, the most recurrent being retinopathy.

In research carried out in 2005, which aimed to verify the occurrence of anxiety symptoms in diabetic patients, it was found that of a sample with 68 participants, 72% had high levels of anxiety. (OLIVEIRA & SALES, 2005)

Depression and anxiety associated with diabetes mellitus have an effect on the patient, in which the presence of these diseases reduces self-care, which can lead to more complications and probable mortality.

The worrying relationship between depressive symptoms and the patient not being able to reach their glucose target, this fact is evident in practice, in study E3, in which, of 1223 individuals analyzed over a period of one year, more than half, 53%, were less likely to reach your glucose goal. It is also mentioned in the study that lifetime depression in the general population was estimated at 16.2%, and when comparing with the prevalence of depression in patients diagnosed with diabetes, there is an estimate of 28.5%.

In studies, a variety of factors are described that, associated with depression and/or

anxiety in people with diabetes, influence the possible evolution of complications in the individual. Among these factors, the presence of comorbidities related to diabetes mellitus, the failure to maintain the glucose target, a longer time since diagnosis of the disease, lower educational level and lower income stand out.

A cross-sectional study was carried out with 893 participants, including men and women diagnosed with diabetes mellitus. The study demonstrated that the occurrence of depressive symptoms was 56.1%, therefore, anxiety symptoms were found in 43.6% of the sample. The study analysis indicated that the symptoms were more associated with being a woman, poor sleep quality, diabetes complications and low income. Participants in the sample who presented depressive and anxiety symptoms had a good blood glucose control rate of 18.7%.

In a study carried out with a group of diabetics, the objective was to understand whether interventions would have an impact on reducing anxiety. The interventions took place over a year and a half, containing physical activities and group interventions, so that physical and psychological aspects could be worked on. Using the Beck BAI Scale as a reference, it was noticed that after a year and

a half of interventions, the participants' level of anxiety went from mild to minimal. This reduction generates important results, as high levels of anxiety lead to poor adherence to treatment, and cause the patient to not reach their glucose goal.

FINAL CONSIDERATIONS

In this integrative review, it was possible to perceive the prevalence and high relationship between anxiety and depression in patients diagnosed with diabetes mellitus types 1 and 2, when compared with the general population, and it is still possible to perceive a greater occurrence of depression in relation to anxiety.

Among the factors associated with anxiety and/or depression in patients with diabetes, poor glycemic control, complications related to diabetes, which are more common in women, low income and low education, stand out.

In view of this, greater training of the multidisciplinary team is necessary so that care can be carried out in order to prevent or alleviate the magnitude of this problem, thus requiring professional action that is based on the principles of humanization and comprehensiveness in care.

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