

Capturing Diabetes Related Distress and Depression

Abstract

One of the most prevalent diseases in the world, diabetes is linked to increased morbidity, mortality, and diminished quality of life. Poor diabetes self-management is linked to high levels of diabetes-related distress, depression, and anxiety in many patients. Poor disease management increases the likelihood of both micro- and macro-vascular complications, which is a key component of diabetes treatment. This emphasizes how important it is to alleviate diabetes-related distress and provide patients with diabetes with appropriate treatment options that address their individual psychosocial burden. The patient perspective on, for instance, barriers to and facilitators of diabetes treatment is crucial for adequate and effective treatment as well as improvements in self-management because patients' perspectives diverge significantly from practitioners' regarding relevant treatment aspects. As a result, the patient perspective needs to be further investigated. In this study, we conducted a scoping review to determine the prevalence of diabetes distress and depression in type 2 diabetes patients in South Asian low- and middle-income countries.

From the individual perspectives of patients with type 1 and type 2 diabetes, this study aims to investigate diabetes-related distress, the course of distress during diabetes management, as well as the obstacles and enabling factors in managing diabetes.

Keywords: Diabetes • Diabetes-related distress glycemic control • Depression and anxiety • Mixed methods design • Mixed methods • Protocol • Stress

Introduction

Diabetes and depression are two major, non-communicable diseases that have been linked to rising morbidity and mortality rates worldwide. However, the majority of research examining the connection between these conditions has been conducted in high-income or northern nations (HICs) [1]. Even though 4 out of 5 diabetics live in low- and middle-income countries (LMICs), little research has been done on these populations' emotional health.

Three meta-analyses indicate that the presence of one of these conditions increases the likelihood of developing the other, indicating that the bidirectional relationship between T2D and depression is well established. Additionally, patients with T2D who suffer from comorbid depression report lower quality of life; glycated haemoglobin (A1C) that is too high; poor self-management of diabetes and an increased risk of diabetes-related complications like neuropathy, retinopathy, and microvascular complications [2]. Diabetes distress is another psychological effect that comes with self-management, along with depression. Diabetes distress, which affects nearly one third of diabetics, refers specifically to the unique and frequently hidden emotional burdens, constant worries, and ongoing concerns that are a part of the spectrum of a patient's experience when managing this demanding, lifelong disease. Higher levels of diabetes distress have been linked to higher A1C, blood pressure, and lipids in cross-sectional studies; a rise in the incidence of medication non-adherence; poorer dietary habits and fewer physical activities [3]. Taking into account these two lines of research, it would appear that the T2D population's self-management efforts and health outcomes are largely influenced by depression and diabetes distress. Adults with T2D have twice the risk of depression compared to those without diabetes, according to studies on depression and diabetes in HICs. A meta-analysis of 42 studies found that approximately 25% of adults with T2D suffer from depression. Additionally, diabetes-related disability and morbidity are linked to T2D and depression. Only one systematic review has examined depression prevalence in T2D patients in LMICs worldwide, and it found an average prevalence 35.7% higher than HIC data.

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Factors associated with poor glycemic control should be taken into consideration because strict glycemic control monitoring and regulation are essential to diabetes management. There is inconsistency in the evidence regarding the connection between poor glycemic control and, for instance, symptoms of depression or anxiety. In adults with type 1 diabetes, some studies found a connection between depression and anxiety symptoms and poor glycemic control, while others found no connection at all [4]. This may be a conceptual issue because the psychosocial adjustment to diabetes that is characterized by anger, guilt, frustration, denial, and loneliness is better described by the term “diabetes-related distress” than by “depression.” Although they appear to overlap and correlate, these two concepts are distinct. This may help to explain why pharmacological and psychological treatments for patients with depression as well as type 1 and type 2 diabetes do not always result in consistent improvements in glycemic control.

Additionally, patients with inadequate glycemic control exhibit elevated symptoms of depression and anxiety. While it has been demonstrated that diabetes raises the risk of depressive symptoms, conversely, 34% more people are likely to develop type 2 diabetes if they have depressive symptoms. Afraid of acute complications like hypoglycaemia or subsequent diseases and complications, diabetics are approximately twice as likely as non-diabetics to develop an anxiety disorder [5]. The presence of psychiatric comorbidity is associated with an increase in both morbidity and mortality as well as a decrease in quality of life, as well as an increase in the risk of subsequent diseases and costs associated with health care. Psychological distress and psychiatric comorbidities are a major focus of diabetes treatment because they not only necessitate adequate treatment on their own but also accelerate the onset and progression of diabetes-associated secondary diseases.

Results

The study’s conceptualization phase was completed in April 2022. The Justus Liebig University Giessen – Faculty of Medicine’s local ethics committee granted ethical approval in January 2022. There were 46 studies included, but only one addressed depression and diabetes distress simultaneously [6]. There

are total of 42 articles on depression and 5 on diabetes distress presented here. The prevalence of diabetes distress ranged from 18.0% to 76.2%, while the prevalence of type 2 diabetes and elevated depressive symptoms ranged from 11.6% to 67.5%.

Discussion

In patients with type 2 diabetes, depression and diabetes distress are both indicators of psychological functioning and can have a significant impact on treatment. However, there are few systematic investigations of the connection between these two psychosocial variables and T2D in LMICs, particularly in South Asian regions [7]. As a result, this study is the first to examine the prevalence of both diabetes distress and elevated depressive symptoms in T2D patients from LMICs in South Asia [8].

Diabetes-related distress and burdens, psychosocial aspects, barriers and facilitators, and what they perceive to be particularly relevant, obstructive, or beneficial regarding these subject areas are the goals of this study, which aims to gain insights into the individual perspective of patients with type 1 and type 2 diabetes on their experiences with their diabetes diagnosis [9]. We anticipate that the applied mixed methods design will enable us to thoroughly investigate individual diabetes-related burdens as well as facilitating factors that contribute to the numerous well-known challenges faced by diabetic patients. As a result, it will inform diabetes treatment and focus on crucial psychosocial aspects necessary for successful treatment. The findings of our study will serve as the foundation for the development of a brand-new questionnaire that will allow for the systematic evaluation of each person’s diabetes-related distress, burdens, and facilitators [10]. This questionnaire will be useful for dialectologists because it will help them plan treatment and will also allow for the systematic evaluation of each person’s challenges and problem areas in future research in this area.

Conclusions

According to this review, the proportion of T2D patients in South Asia with elevated depressive symptoms could be as low as one in four or as high as one in two. In light of these figures, LMICs in South Asia’s health care system must incorporate screening,

diagnosis, and treatment for this mental health condition. It was discovered that South Asians living in high-income countries and data from high-income countries had significantly lower rates of elevated depressive symptoms. Compared to other studies, it was found that diabetes-related distress was lower; however, this observation is inconclusive due to a lack of data. The focus on urban clinic-based populations, variations in depression inventories, and a lack of culturally tailored inventories are identified as limitations and areas requiring additional research. In South Asian countries, our review demonstrates the need for increased mental health screening and treatment in diabetes care.

Patients with type 1 and type 2 diabetes will share their individual experiences with diabetes management and what they consider to be relevant, obstructive, or beneficial in this study. The knowledge gained may assist in further customizing diabetes treatment to the specific requirements of diabetic patients, thereby enhancing diabetes self-management.

Acknowledgement

None

Conflict of Interest

None

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