

Depression or diabetes distress?

The importance of screening in adults with type 2 diabetes

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Psychological distress is common in people with type 2 diabetes and is linked with poorer health outcomes. Although depression and diabetes distress are related, they are distinct constructs that differentially impact biological and behavioural diabetes outcomes. Screening for both depression and diabetes distress may help personalise care and inform referral pathways for people with type 2 diabetes.

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Key points

- Many patients with diabetes experience emotional distress. Although this may mimic depression, it can reflect a patient's emotional adjustment to a chronic disease.
- Both depressive symptoms and diabetes distress can be assessed using questionnaires such as the Patient Health Questionnaire 9 and the Diabetes Distress Scale.
- Diabetes distress comes from four main sources: cognitive distress, interpersonal distress, regimen distress and distress arising from interactions with healthcare providers.
- Individualised treatment is a central principle of type 2 diabetes management and can be optimised by considering a patient's emotional distress profile in conjunction with their overall treatment goals.

Glucose plays a central role in diabetes management for the estimated one million adults with type 2 diabetes in Australia.¹ Patients with type 2 diabetes experience elevated rates of emotional distress that increase treatment complexity, contribute to greater social and occupational disability, and impact diabetes health and self-management.² Current general practice management guidelines for type 2 diabetes recommend regular mental health screening to facilitate appropriate intervention and/or referral.³

Questionnaires can provide a brief and effective mental health assessment; however, interpreting these is not always straightforward in the context of type 2 diabetes. For example, symptom scores on common depression inventories can be misleading because some symptoms of depression, such as lethargy or disturbed appetite, are also features of type 2 diabetes.⁴ Indeed, evidence suggests that large proportions of people with type 2 diabetes who screen positive for depression on questionnaires do not meet criteria for diagnosis of major depressive disorder (MDD) when assessed using a structured clinical interview.⁵

Table 1. Sources of diabetes distress and talking points with your patient

Source	Description	Talking points
Regimen distress	Difficulties adjusting to a diabetes care regimen. High regimen distress reflects struggles with exercise, glucose monitoring, diet and other important diabetes management behaviours.	What is the most challenging part of your diabetes regimen? If you could change one thing about your regimen, what would it be?
Interpersonal distress	Perceived lack of support from family and friends. High interpersonal distress suggests that the patient feels that their diabetes is misunderstood or unsupported by important people in their life.	Who in your life best understands you and your diabetes? What other sources of social support for your diabetes do you wish you had?
Cognitive distress	How a patient thinks about diabetes. High cognitive distress reflects fears that diabetes is dangerous and will have severe long-term consequences.	What is your number one concern about living with diabetes? Do you ever find yourself worrying a lot about your diabetes?
Physician-related distress	Stress due to interacting with healthcare providers. High physician-related distress indicates that the patient is finding it difficult to access or maintain a consistent and supportive care team.	What is it like for you to discuss your diabetes health? How easy is it for you to see all the people on your diabetes care team?

Some patients with type 2 diabetes who report elevated depressive symptoms may instead be experiencing a form of psychological distress that is specific to diabetes, termed diabetes distress.^{6,7} Diabetes distress is more common than depression in some people (rates up to 46%), can become chronic, and is more strongly associated with biological (e.g. glycaemic management) and behavioural (e.g. regular exercise) aspects of type 2 diabetes than depressive symptoms.⁸⁻¹⁰ Screening for both depression and diabetes distress may help GPs distinguish between emotional disturbance reflective of psychiatric illness (e.g. MDD) and distress that occurs as a normative response to managing a chronic and complex illness (i.e. diabetes distress).

Diabetes distress comes from four main sources (Table 1). These are cognitive distress (e.g. fearing long-term health complications), interpersonal distress (e.g. feeling unsupported by family and friends), regimen distress (e.g. coping with a new medical routine), and distress arising from interactions with healthcare providers (e.g. not having a regular GP). Regimen distress has particular relevance to disease management, over and above depressive symptoms.¹¹⁻¹³ Patients experiencing severe regimen distress are more likely to experience difficulties with blood glucose management and may benefit most from interventions targeting daily disease management. On the other

hand, patients experiencing severe interpersonal distress combined with high levels of depressive symptoms are at risk of more substantial functional impairments and may require more substantial mental health support. By understanding the source(s) of distress, a GP can better select an appropriate care pathway.

Assessment of depression and diabetes distress

Both depressive symptoms and diabetes distress can be quickly assessed using freely available questionnaires. The Patient Health Questionnaire 9 (PHQ-9) is a brief and useful measure of the severity of symptoms of MDD.¹⁴ Total scores on the PHQ-9 of 5 to 9 represent mild depression, 10 to 14 moderate depression, 15 to 19 moderately-to-severe depression and 20 to 27 severe depression. In people with diabetes, a cut-off score of 12 or more is recommended for identifying probable MDD in primary care assessment.^{15,16}

The Diabetes Distress Scale (DDS-17) is a 17-item measure of diabetes-related emotional distress.¹⁷ The DDS-17 yields a total score, which is calculated as the average across all items, and also four subscale scores that each address a different kind of distress (i.e. cognitive distress, interpersonal distress, regimen distress and physician-related distress), calculated as mean item scores in each subscale. A score of 3 or more in a subscale

indicates clinically relevant distress in that particular subscale.

Choosing a care pathway based on a patient's distress profile

Individualised treatment is a central principle of type 2 diabetes management and can be optimised by considering a patient's emotional distress profile in conjunction with their overall treatment goals.¹⁸ As already mentioned, regimen and interpersonal distress appear most related to important health outcomes, and therefore being aware of these may help tailor interventions.

A patient whose distress profile indicates severe regimen distress with mild-depressive symptoms may benefit most from self-care training and collaborative management of regimen demands, rather than interventions that target mood. This may be the most pragmatic way to simultaneously alleviate distress while improving diabetes management. Patients who show a distress profile of moderate-depressive symptoms and broader sources of diabetes distress, especially clinically relevant interpersonal distress, may require more intensive intervention to reduce the impact on general functioning, including face-to-face psychological treatments, online programs for depression in diabetes and/or interpersonal support resources, such as peer-support networks. A decision-making tool for assessing emotional distress profiles is presented in Table 2.

Table 2. Identifying emotional distress profiles and choosing a care pathway

	Diabetes Distress Scale (average subscale score)		Patient Health Questionnaire 9 (total score)		Care pathway
	≥3 for regimen distress	≥3 for interpersonal distress	0-11 (mild-to-moderate depressive symptoms)	≥12 (moderate-to-severe depressive symptoms)	
Primarily regimen distress	✓	×	✓	×	Risk of unhealthy diabetes management. May benefit most from diabetes education, self-management resources and coping strategies.
Complex distress/ mental illness risk	✓	✓	×	✓	Risk of poor diabetes control, more substantial functional impairment, and mental illness. May benefit most from full mental health assessment and referral to mental health services.

Discussing diabetes distress with your patient

Many people living with diabetes are sensitive to the potential double stigma of having both a physical and mental health condition.¹⁹ Conceptualising diabetes distress as a common aspect of diabetes itself, rather than a psychiatric illness, may further alleviate psychological burden and help the person feel that their condition is manageable.

It may be useful to describe diabetes distress as a well-understood phenomenon and discuss each of the four known sources of diabetes distress with your patient to help understand their key concerns. Talking points to help begin a conversation about the sources of diabetes distress are presented in Table 1. When discussing a patient's diabetes care it is important to consider the impact that language can have. Diabetes Australia provide a useful guide to supportive language in diabetes care on their website (Box).

Evidence-based treatments

Although depressive symptoms respond to pharmacotherapy, effects on diabetes health may be limited, and antidepressants that antagonise cholinergic M3-receptors (such as amitriptyline or clomipramine) may be contraindicated in people with diabetes.²⁰⁻²² Face-to-face cognitive behavioural therapy is effective in reducing depressive symptoms and improving diabetes health.^{23,24} However, this may not be easily accessible to patients outside metropolitan areas, in which case

online therapies may be helpful. For people with mild-to-moderate depressive symptoms, myCompass by Black Dog Institute is freely available and features a diabetes well-being module, along with other activities to help manage stress and improve day-to-day functioning. For people with moderate-to-severe depressive symptoms, the depression course available from This Way Up by CRUFAD is effective in addressing both depressive symptoms and some aspects of diabetes distress, although may not improve diabetes health (Box).²⁵

Several approaches to addressing diabetes distress have been trialled and the most effective programs focus on diabetes-specific problem solving and psychological strategies for managing short-term emotional distress.²⁶ If available, a diabetes educator or health psychologist can help the patient identify and address their regimen concerns while building coping skills. Diabetes Australia's website provides practical suggestions for addressing common difficulties in everyday diabetes management (www.diabetesaustralia.com.au/living-with-diabetes). Online tools, such as myCompass, which offer a broad selection of wellbeing tools, may also help patients manage diabetes distress (Box).

Conclusion

Many patients with diabetes experience emotional distress. Although this may mimic depression on screening questionnaires, it may simply reflect a patient's emotional

Online tools for patients with depressive symptoms or diabetes distress

- **myCompass by Black Dog Institute, Sydney**
A personalised self-help tool
www.mycompass.org.au
- **This Way Up by Clinical Research Unit for Anxiety and Depression (CRUFAD) at St Vincent's Hospital, Sydney**
Online courses to help identify, understand and improve psychological difficulties
www.thiswayup.org.au
- **Diabetes Australia**
www.diabetesaustralia.com.au

adjustment to a chronic disease. Screening for both depression and diabetes can help personalise treatment by understanding a patient's emotional distress profile. Distress about the demands of a diabetes regimen has a significant impact on diabetes health outcomes, especially glycaemic management. Selecting care pathways that reflect the source of a patient's emotional distress may lead to better treatment engagement and improved diabetes management. **ET**

References

A list of references is included in the online version of this article (www.endocrinologytoday.com.au).

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