Are we over-diagnosing depression in people with type 1 diabetes?

Jacqueline Fosbury

Diabetes Psychotherapist and Supervisor in Psychotherapy, Brighton and Sussex Universities NHS Trust

Clare Shaban

Consultant Clinical Psychologist, Bournemouth Diabetes and Endocrine Centre, Royal Bournemouth Hospital

Lawrence Fisher and colleagues recently published an interesting article in *Diabetic Medicine* discussing the prevalence of depression in people with type 1 diabetes and the problem of over-diagnosis. Their study aimed to identify the rate of false-positive results and they found an unexpectedly low rate of current depression and major depressive disorder, and a very high rate of false-positive results using the Patient Health Questionnaire. In this commentary, Jacqueline Fosbury and Clare Shaban explore this issue further and suggest how diabetes distress should be managed.

The central tenet of the article written by Fisher et al (2015) is that there is a generalised acceptance of a high prevalence of depression among people with diabetes, with significant associations between depression, self-care behaviour and glycaemic control. However, the data from this study reveals high false-positive rates of depression, with significant levels of diabetes-specific distress due to living with diabetes. This refers to the emotional distress associated with managing a long-term condition over time and is an area of greater concern, which requires more targeted interventions directed at the emotional side of diabetes.

Background

The suggestion that depression and diabetes distress are distinct entities, which need to be assessed and managed differently, with targeted interventions was first discussed in the context of type 2 diabetes in 2007 (Fisher et al, 2007). The study found that most people with diabetes and high levels of depressive symptoms are not clinically depressed, and that people may in fact have a general emotional and diabetes-specific distress that should not be treated as clinical depression.

This current study set out to determine the prevalence of depression and diabetes distress in people with type 1 diabetes. The aims were to:

- Explore whether the unexpectedly low prevalence of depression reported by Trief et al (2014) can be replicated.
- Investigate the prevalence of major depressive disorder assessed by structured interview (Structured Clinical Interview for DSM Disorders 1; SCID), and how closely the 8-item Patient Health Questionnaire (PHQ-8) classifications match major depressive disorder diagnoses.
- Determine the prevalence of diabetes distress and the relationship between depression and diabetes distress.
- Examine general life stresses using the General Life Stress Scale (GLSS), which examines non-diabetes difficulties relating to work, financial and family problems.
- Explore the relationship between depression, diabetes distress and HbA_{1c}.

Findings

The prevalence of depression in type 1 diabetes using PHQ-8 was surprisingly low, consistent with Trief's population. Shaban and colleagues had similar findings in 2006 and 2009, which do not support the common view of high rates of depression in people with type 1 diabetes (Shaban et al, 2006; 2009).

Previous studies suggest the PHQ-8 gives high rates of false-positives, when compared with the SCID interview. For example, 52–71%

of those reaching depression criteria on PHQ were not depressed on the SCID.

Prevalence of diabetes distress is substantially higher than depression on any measure. Moderate levels of diabetes distress are significantly associated with disease management and glycaemic control.

This suggests a substantial proportion of underlying emotional distress reflected by these measures may be related to the emotional impact of the condition and not necessarily to underlying psychopathology.

The interaction between anchored scores of diabetes distress and GLSS provide an opportunity for increasing treatment precision by focusing on source-specific interventions and not exclusively on interventions for affective disorders.

Implications for diabetes work in the UK

1. There must be a focus on assessing people with diabetes for diabetes distress and treating accordingly.
2. Improved Access to Psychological Therapies services use the PHQ. This research has suggested that this should be supplemented by measuring diabetes distress in order to avoid misdiagnosis and mistreatment.
3. Healthcare professionals should be aware of the psychological implications of managing a demanding chronic condition over time.
4. Individuals with diabetes should have access to structured education in order to optimise their diabetes knowledge and, importantly, improve their self-management skills, which will help to alleviate diabetes distress.
5. Specialist psychological intervention provided by diabetes psychologists/psychotherapists is required for more complex presentations both prior to and after structured education. This is especially important when an individual fails to show reduced diabetes distress after attending structured education.
6. This intervention should address diabetes-specific problems, such as the individual's reaction to the diagnosis, needle anxiety, disordered eating, wide-ranging anxieties regarding complications and fear of hypoglycaemia. ■

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