Tailoring psychological management in young people with type 1 diabetes

TONI LINDSAY BPsych(Hons), DClinHlthPsych

Normalising the experience of difficulties in self-managing diabetes and accessing support will improve diabetes control and overall quality of life for young people with diabetes. For patients with significant mental health concerns it is imperative that appropriate mental health support is readily accessible and delivered in a sustained manner.

Key points

- **Diagnosing depression in adolescents is more complex than with adults and often takes a specialist in adolescent behaviour to be able to make the diagnosis.**
- **A good relationship and engagement with health professionals is often as important as any intervention that may occur for young people with diabetes.**
- **Examining the complexities of a young person's mental health concerns in the context of their diabetes should perhaps be a consideration for all patients with type 1 diabetes who present for support and treatment.**
- **Psychological treatment includes motivational interviewing and cognitive behavioural therapy.**

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Dr Lindsay is a Psychologist in Private Practice specialising in chronic disease management in Newtown, Sydney; Clinical Psychologist at Psycho-Oncology Service, Chris O'Brien Lifehouse, Sydney; and Adjunct Associate Lecturer at The University of Sydney Nursing School, Sydney, NSW.

Diabetes of any type is a complex condition to manage psychologically, as well as medically. Anecdotally, clinicians often report feeling out of their knowledge area in managing and treating patients with psychological issues that are common to diabetes, including depression, anxiety and nonadherence, as well as managing lifestyle factors that contribute to the management of the illness itself. Complications in these management factors can occur, particularly in adolescents and young people who often find it difficult to engage in meaningful ongoing therapeutic relationships. A vicious cycle may then develop whereby depression and/or anxiety can exacerbate blood glucose control in people with type 1 diabetes, especially due to lack of adherence to self-care, which is required for lifestyle therapy, insulin therapy and blood glucose monitoring.

This article explores a case and highlights some of the potential difficulties of managing a young woman with recent onset type 1 diabetes and pre-existing mental health concerns, such as risk-taking behaviours, self-harm, depression and eating disorders. The importance of good relationships and engagement with healthcare professionals is discussed and some psychological treatment options are described.

Case study

Jane is a 19-year-old woman who was diagnosed with type 1 diabetes just under a year ago. Despite significant amounts of education and examples of self-management and diabetes control, she continues to have poor blood glucose levels, and openly admits to 'running high' as she 'can't be bothered' managing her insulin. Jane had stopped working in retail just after her diagnosis, and reports that she is 'unable to work' because of her diabetes. Jane lives in a large share house that has a significant drug and alcohol culture, which she admits to participating in, and in the past she has used self-harming behaviours. She has a history of depression since her early teens, and is estranged from her

family. She denies any current specific suicidal ideation; however, reports that she 'doesn't care what happens' to her, and is not worried about the side effects of not controlling her diabetes in the short or longer term. On questioning, Jane reports she has occasional episodes of 'bingeing and purging', then prolonged intervals, often days, of little or no carbohydrate or caloric intake. She says avoiding insulin helps prevent 'bloating'. Her body mass index is 20.5 kg/m^2 and she has signs of dehydration, including some features of postural hypotension.

Concerns arising from this case

The following is a discussion of the significant concerns arising from Jane's case and strategies for working with such patients in a general practice setting.

Suicidal ideation and self-harm

Assessment and management of risk in any patient is of utmost importance; however, when working with young people with access to means for self-harm, including insulin and needles, there is an increased urgency for intervention and action. In Jane's case, she has a demonstrated history of self-harming. Young people with a physical illness, previous history of self-harming and drug and alcohol use have a significantly higher risk of ongoing self harm[1] and so for Jane the concept of her risk must be taken seriously, and this requires intervention by a mental health specialist.

Unmanaged depression

Low motivation, feelings of hopelessness/worthlessness, changes in sleep and appetite, irritability, feeling overwhelmed and anxious thinking are all common features of depression in young people. All of these impact on a young person's ability to manage psychological and physiological symptoms of their diabetes.[2] Although identifying depression in an adolescent population is often difficult, screening the adolescent population with diabetes has been shown to improve detection and leads to improved clinical outcomes.[3] Jane has a long history of untreated depression, which potentially will impact on not only her ability to cope with her diagnosis, but also other daily tasks of self-care, coping and motivation.

Although the condition of 'diabetes distress', which refers to the unique, often hidden burden and worries that are part of the spectrum of patient experience when managing their diabetes, is well recognised,[4] clinical depression appears to be the pervasive pathological mood state in Jane's case.

Risk-taking behaviours

Jane has demonstrated significant risk-taking behaviours, including ongoing drug and alcohol use, self-harming, as well as poor self-management of her diabetes. Risk-taking behaviours are often a cornerstone of adolescent behaviour; however, in the context of her diabetes Jane is being exposed to a significant life-threatening risk. In the context of her alcohol and drug use, Jane at times is likely to have poorer impulse control, difficulties with decision making and poorer understanding of consequences. These factors in combination with her low mood, poor social support and poor motivation provide significant reasons for concern, and highlight the need for specialist intervention and psychological strategies to support her in both her diabetes and mental health management.

Often a starting point for working with young people is to establish strong rapport and engage in conversation and exploration about the key aspects of their lives, not simply focusing on the diabetes or presenting mental health issues. However, due to the current concerns with Jane's risk-taking behaviours, a thorough risk assessment needs to be undertaken and, if required, linking with crisis services to help in her management. In a practice context, the GP may be the first person to have explored a patient's worries or concerns, and often simply asking about risk provides validation and a sense of engagement with the young person.

Eating disorders

Jane describes episodes of bingeing and purging with prolonged intervals (days) of little or no carbohydrate intake. This pattern of restrictive eating then bingeing will have further destabilised her blood glucose levels, and made safe blood glucose control (that is, avoiding severe hypoglycaemia or hyperglycaemia) much more difficult. Eating disorders, often of a nonspecific type (eating disorder not otherwise specified) is common in type 1 diabetes, especially in young women.[5]

An eating disorder is often associated with deliberate insulin omission, marked hyperglycaemia and dehydration in patients with type 1 diabetes. Its presence demands psychological care, often with psychiatric input, in combination with ongoing assistance from a specialist healthcare team, including an endocrinologist, diabetes educator and dietitian.

Diagnosing depression in adolescents

It is common for adolescents to engage in behaviours consistent with their peers, including risk taking, reluctance to engage in support and treatment, as well as limited understanding/regard for consequences. All of these experiences are very appropriate in the context of 'normal' adolescent behaviour; however, with a diagnosis of diabetes, these behaviours take on a very different impact. Clinically, adolescents are generally likely to become withdrawn, have poor sleep and irritability and be hard to engage when experiencing low mood, although disengagement from healthcare professionals in itself is not a reliable predictor of low mood.

Discerning what is depression in adolescents is more complex than with adults and often takes a specialist in adolescent behaviour to be able to make the diagnosis. However, a good marker is often whether they have disengaged with their peers or from activities they have enjoyed in the past. Furthermore, if an adolescent mentions themes consistent with feeling hopeless, helpless or self-harming, this is always a cause for concern, although it is worth mentioning that in some adolescent subcultures self-harming is accepted and seen as a normal behaviour.

Online tools and resources for young people with diabetes and mental health concerns

Smiling Mind
A unique web and app-based program developed by a team of psychologists with expertise in youth and adolescent therapy, mindfulness meditation and web-based wellness programs.
http://smilingmind.com.au

Headspace
A government established National Youth Mental Health Foundation, providing mental and health wellbeing support, information and services to young people.
www.headspace.org.au

MoodGym
A free self-help program to teach cognitive behavioural therapy skills to people vulnerable to depression and anxiety.
https://moodgym.anu.edu.au/welcome

Diabetes Counselling Online
An online counselling and discussion forum for people with diabetes in Australia.
www.diabetescounselling.com.au

Relationships and engagement with healthcare professionals

In the adolescent population, the relationship and engagement with healthcare professionals is often as important as any intervention that may occur. A reliable, consistent and engaged adult (whether it be the GP, endocrinologist, psychologist, nurse educator or practitioner) who can build a good relationship with the young person will be a very helpful influence in the management of that person's diabetes and mental health. Although young people are often difficult to engage with initially, once the relationship is built, management of their care and life outside of diabetes becomes easier and interventions become more effective.

Psychological treatment options

Given the complexity of mental health concerns in patients with diabetes, there have been several schools of thought about the best or most effective treatment program. The main area of research has been in motivational interviewing and cognitive behavioural therapy (CBT). In both adults and adolescents, there have been randomised trials showing improvement in glycaemic markers following motivational interviewing and CBT interventions, but greatest improvements were shown by combining both modalities.[6,7] In addition to this, efficacy has been shown in engaging patients in nurse-led motivational interviewing skills training in the context of routine diabetes education.[8] A meta-analysis of CBT interventions showed that there was some positive effect on adherence and diabetes markers,[9] as well as suggestion that psychological interventions are particularly effective when incorporated into routine care.[10] A meta-analysis demonstrated effective glycaemic control in children and adolescents with type 1 diabetes following diabetes-specific psychological intervention; however, this study showed limited effects in adults.[11] Engagement in routine psychological care, either by nurse-led programs or by psychologist intervention, may therefore provide significant benefits in the management of the diabetes itself and improve psychological wellbeing in the patient.

It is important to note that access to psychological support can easily be facilitated by providing young patients with a GP developed mental health care plan, which allows for rebated psychological care for up to 10 sessions per year. However, when initiating and developing a mental health care plan, it is integral to treatment success that the young person is engaged and supported in developing psychological strategies. GPs often use tools including the Depression Anxiety Stress Scale, Kessler Psychological Distress Scale (K10), the Patient Health Questionaire-2 or Problem Areas In Diabetes (PAID) to guide the development of the care plan, and engage young people in a discussion about their current psychological symptoms. In addition, when the young person is being managed within a multidisciplinary team, the role of the psychologist can complement other services, and it is essential that clear communication pathways are established for continuity of care.

Social media and intervention tools

Young people are often receptive to online and social media support, including tools such as Smiling Mind, Headspace, and MoodGym (see box), as well as forums for diabetes-specific support and Facebook support groups.

Conclusion

Examining the complexities of a young person's mental health concerns in the context of their diabetes should not be the exception, but perhaps a consideration for all patients who come for support and treatment with type 1 diabetes. Currently, routine screening for psychological disorders in patients with type 1 diabetes beyond that of clinical assessment alone (such as with screening questionnaires administered by healthcare professionals) remains controversial.[5] Normalising the experience of difficulties in self-managing diabetes and accessing support will improve diabetes control and overall quality of life. For young people who have significant mental health concerns, such as in the case of Jane, it is imperative that appropriate mental health support is readily accessible and delivered in a sustained manner.

Outcome: *Jane was provided with specific psychological intervention around managing the adjustment to her illness and risk-taking behaviours, and is showing some improvement in her situation. However, it must be noted that complex situations such as this are rarely resolved completely and are often multifactorial. In this instance, symptom management and more effective diabetes management are the goals, which will have flow-on effects to other aspects of Jane's life.* **ET**

References

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

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