

# The use of cognitive behavioural therapy in diabetes care: A review and case study

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## Article points

1. Cognitive behavioural therapy (CBT) uses measurement tools to determine the individual's perception and understanding of their diabetes and self-management.
2. One of the main difficulties in providing CBT services is timing. It is recommended that the healthcare professional has eight sessions with the person with diabetes.
3. In future practice it would be ideal if CBT could become an integrated aspect in diabetes care.

## Key words

- Cognitive behavioural therapy
- Self-management
- Socratic dialogue

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This article explores the psychological aspects of diabetes care and cognitive behavioural therapy (CBT). The aim of CBT is to focus the direction to empowerment and confidence of the person with diabetes, while addressing anxiety and depression relating to the condition. CBT uses measurement tools to determine the individual's perception and understanding of their diabetes and self-management. The use of CBT is explored within diabetes care and its benefits to increase compliance, understanding and education.

Cognitive behavioural therapy (CBT) uses questioning techniques to stimulate information gathering. This is named "Socratic dialogue" after the philosopher Socrates in around 400BC. His questioning method was for a student to elicit their own conclusions through questioning enquiry, rather than by question and answer (Westbrook et al, 2008). Socratic dialogue is used to explore different points of view and perspectives by exploring other possibilities (Sanders and Wills, 2005). The purpose of the questioning method is for the individual to recognise their current thoughts, sparking the possibilities of alternative thoughts, behaviours and, ultimately, change.

Analysis of people's problems is an assessment phase, and leads to a formulation exploring thoughts and images developed into a treatment plan (*Figure 1*). Measurement tools are used as part of the structure of CBT, such as the Hospital Anxiety and Depression (HAD) scale (Zigmond and Snaith, 1983). This is a list of questions

pertaining to anxiety and depression scored by the patient to determine a level of mood.

There are several questionnaires specifically formulated for diabetes: the Hypoglycaemia Fear Survey; Diabetes Treatment Satisfaction Questionnaire; Perceived Control of Diabetes Questionnaire; Negative Cognitive Error Questionnaire, and so on (Phillips and Wright, 2009). In the author's experience, such tools are not widely used in clinical practice, possibly due to the time involved in administering and recording the results of such surveys.

The author believes that an increased use of specific questionnaires may lead to an increase in referrals to the CBT services. This raises questions as to whether all people with diabetes should have regular, or at least initial, access to CBT services to improve, assess and address thoughts of the long-term self-management of their condition. Worryingly, 85% of UK diabetes services do not have access to psychological care (Diabetes UK, 2008).

**Page points**

1. The author first became interested in psychological issues while working as a DSN for 6 years within an acute Trust.
2. In clinical practice, the opportunity to fully counsel people with diabetes has not arisen often, due to timing, but the authors has been able to use the skills she obtained and apply this to diabetes care.

**Clinical practice**

The author first became interested in psychological issues while working as a DSN for 6 years within an acute Trust. Many individuals with diabetes highlighted issues they had with compliance, adherence to medication and self-care. On further investigation the author found that CBT is recommended as the primary psychological therapy for looking at “negative behaviours” and “dysfunctional thoughts” among people with long-term conditions (NICE, 2007; Westbrook et al, 2008).

Following this, the author completed a foundation module in CBT at the University of Cumbria, which gave her the opportunity to explore CBT relating to practice. Other short courses are available through local adult education institutes as part of counselling certificates.

The course covered the basics of CBT practice, construction of an assessment, and questioning

techniques for exploration of negative thinking by people with long-term conditions, with role-play used to practice the techniques.

In clinical practice, the opportunity to fully counsel people with diabetes has not arisen often, due to timing, but the authors has been able to use the skills she obtained and apply this to diabetes care. The way in which conversations are structured using the CBT model allows further questioning and conversation as to peoples’ beliefs, fears and concerns. This alone has uncovered many misconceptions that people with diabetes have relating to hypoglycaemia, complications and medication.

Having experienced the use of questioning techniques unique to CBT, the author believes she is able to have another level of conversations with people with diabetes, with a greater understanding and in a fashion that is not intrusive. The course has enabled her to using this skill in daily practice,

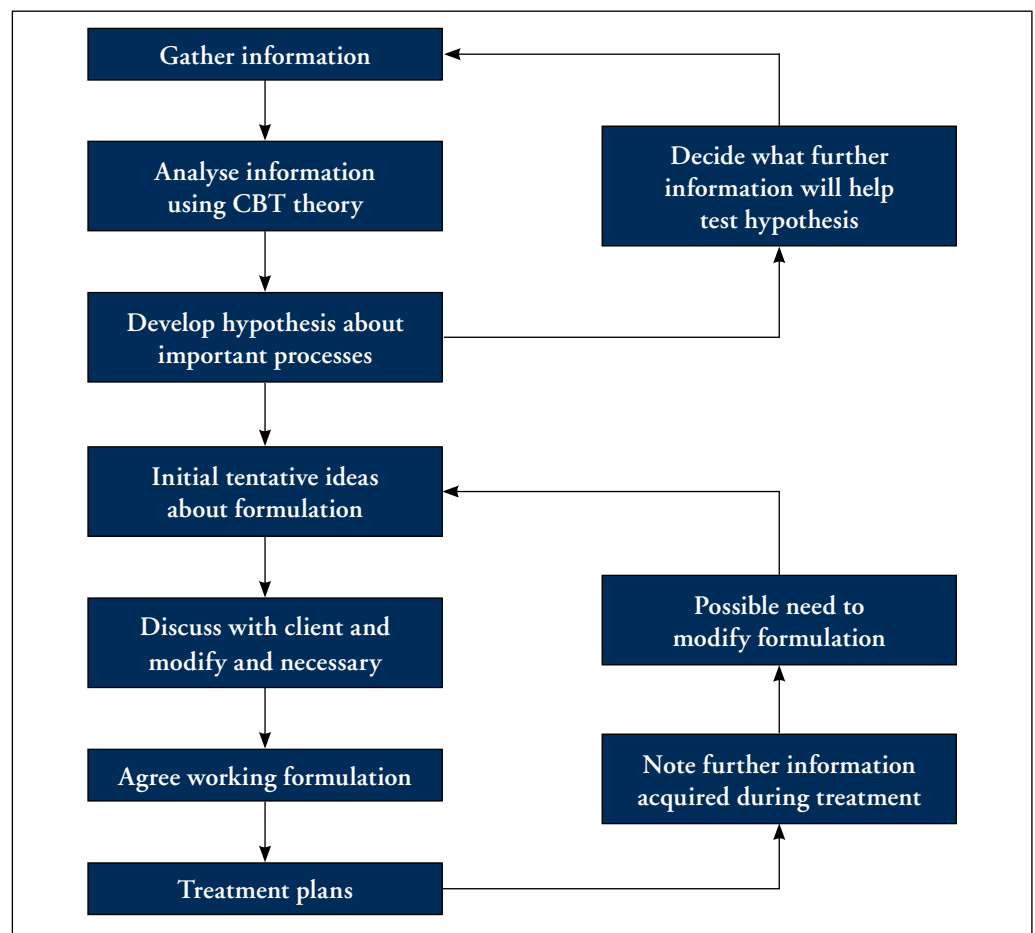


Figure 1. Process of Assessment. Adapted from Westbrook et al (2008).

**Page points**

1. Cognitive behavioural therapy (CBT) can enhance peoples' understanding of diabetes care, and this has been shown to improve both glycaemic control and depression.
2. One of the main difficulties in providing CBT services is timing. It is recommended that the healthcare professional has eight sessions with the person with diabetes.
3. In future practice it would be ideal if CBT could become an integrated aspect in diabetes care.

even if therapy from beginning to end is not frequently used in her practice.

**Literature review**

It is important to recognise that a person with a long-term condition, such as diabetes, needs to be understood, especially the “psychological and behavioural barriers to effective diabetes self-management and decision making” (Phillips and Wright, 2009). CBT can enhance peoples' understanding of diabetes care, and this has been shown to improve both glycaemic control and depression (Lustman et al, 1998).

Despite 41% of people with diabetes suffering from poor psychological wellbeing, 85% do not have access to some form of psychological care (Diabetes UK, 2008), however, where services do exist, 90% of these provide CBT.

Diabetes UK (2008) recommends that healthcare professionals should be trained to deliver emotional and psychological support with diabetes care. In the author's local area, training is underway with the extension to resources under the national *Improving Access to Psychological Therapies* programme (Department of Health, 2008). People with diabetes can be referred to the service for CBT if they have a current diagnosis of anxiety or depression. The integration of CBT into practice means greater emphasis on assessing people's problems, as diabetes is a condition that requires specific lifestyle intervention for optimum health and self-management (Amsberg et al, 2009).

One of the main difficulties in providing CBT services is timing. It is recommended that the healthcare professional has eight sessions with the person with diabetes (Kinsella and Garland, 2008), and the training requires attendance at a university or college and course work. A further difficulty is that a clinical supervisor practicing CBT is needed to support the trainee – requiring motivation and commitment from both parties. Training elements can include video or audio taping of a therapy session for discussion with the supervisor and with consent from the person with diabetes.

**Therapeutic relationships**

In CBT, the relationship between the person with diabetes and the therapist is collaborative, and the

individual is an “active contributor” (Beck, 1995; Westbrook et al, 2008). Brough (2004) claims that a therapeutic relationship, as described in CBT, is used by nurses anyway, and this skill is developed early in their careers, making nurses not completely naïve to CBT practice.

An element to the therapeutic interaction is educating the individual about CBT. The purpose of socialisation is to develop transferable skills for future practice once therapy has ended. The advantage of the CBT model in diabetes care is that relapse and adherence are issues addressed within therapy (Amsberg et al, 2009). The person with diabetes continually practises skills for coping, and applies the skills they acquired in therapy.

**Conclusion**

In future practice it would be ideal if CBT could become an integrated aspect in diabetes care. Aspects of CBT, such as Socratic dialogue and diabetes-specific questionnaires, would help healthcare professionals understand more about the person with diabetes' perception of their condition and how they self-care. Maybe access for all people with diabetes to CBT services is over-reaching, considering the availability of resources, but the author believes that the skills needed to apply the therapy could be well adapted for diabetes care. Structured CBT training is necessary to ensure skills are developed with expert guidance from facilitators, and practise of questioning can be established before used in clinical practice. Gaining an understanding of psychological care promotes relevant, timely referrals (Phillips and Wright, 2009).

Many would argue that current resources are not able to provide CBT support to all diabetes services, but further understanding of people with depression and anxiety hindering their self-care would at least uncover those individuals most in need of referral to psychological services and a step forward in preventing future diabetes complications. Continuing without CBT in diabetes continue to stretch resources within the NHS when many cases could be resolved through greater understanding. ■

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#### Appendix 1. Case study illustrating the use of cognitive behavioural therapy.

Mrs E is 52 years old and has type 2 diabetes. She was commenced on twice-daily insulin 20 years ago. She tried an analogue insulin 3 years ago, which resulted in a deterioration in glycaemic control. Mrs E was unhappy with the change and returned to the twice-daily regimen. She is generally fit and well with no other comorbidities and leads an active life with regular exercise, walking her dogs twice a day and eating healthily. Mrs E is active within her family and looks after her grandchildren regularly.

Mrs E attends her routine diabetes appointments, and at recent annual review had an HbA<sub>1c</sub> level of 6.5% (48mmol/mol). She presented back to the clinic following a request for a repeat prescription, which highlighted that she was using approximately eight test strips per day. In the clinic appointment Mrs E was frustrated and angry that she was being told she was using too many test strips. Using the skills acquired during training in cognitive behavioural therapy (CBT), the author discussed these frustrations with Mrs E.

The questions used in CBT are termed the five W's: what, where, when, why, and whom; and the model used is termed FIND: frequency, intensity, number of times, and duration of the individual's problem. Discussing behaviours, avoidance, rituals and consequences can deepen the healthcare professional's understanding of the person with diabetes' perspective (Grant et al, 2008).

Mrs E stated she was happy with her diabetes control. She explained that she needed to test frequently to make sure that her blood glucose levels were within her target range, and that she was not about to have a hypoglycaemic episode. On discussion of the warning signs for hypoglycaemia, it was established that the frequency of these episodes is approximately once a month, usually on busy days when Mrs E had not eaten much at lunchtime. On further enquiry Mrs E described a time when she had poor control with frequent episodes of hypoglycaemia. She had become frightened and needed the assistance of another person to eat to correct her blood glucose levels. This event had occurred 20 years previously.

At this point she recognised that her negative automatic thoughts about testing frequently were related to how she felt 20 years ago, and were the driving influence of her fears. When she explored the differences between then and now, she is currently using a different type of insulin, her lifestyle is different, she eats regularly, has more of a routine, and more knowledge about her diabetes. She recognised that if she tested less some days she would have more test strips for other days when she may need to have more tests, and began to describe scenarios to alternative ways of thinking. For example, if she had a quiet day at home she would be able to test less than on busier days with the grandchildren. On further discussion she thought she would benefit from working on her fear with the support of the local CBT services and a referral was made.

Without the skills of CBT the author believes that she would not have been able to discuss Mrs E's problem in a structured and succinct manner. The use of this technique provides a deeper understanding of perspective from the clients viewpoint, and a structure with a determined beginning for discussion.