Psychological training for nurses improves HbA_{1c} levels

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Psychological issues can interfere with a person's ability and confidence to manage all the various aspects of his or her diabetes self-care tasks. Previous studies have raised the possibility that psychological treatments could be used to improve diabetes control (Ismail et al, 2004; Winkley et al, 2006).

The author's research group was interested in investigating two types of therapy: motivational enhancement therapy (MET) and cognitive behavioural therapy (CBT). We adapted the generic forms of the therapy to our understanding and knowledge of diabetes-specific psychological problems based on extensive clinical experience.

MET is brief, focused, goal-directed therapy (one to four sessions), during which the therapist counsels the individual with diabetes to motivate him or her to follow healthy behaviours. For instance, even thinking about wanting to have better diabetes control is given lots of positive affirmation and regard because this is a genuine commitment to want things to be better.

CBT is a longer-duration therapy (6–18 sessions) that aims to help people identify their unhelpful thoughts, feelings and behaviours and replace them with more helpful ones. For instance, a person may not want to risk reducing his or her blood glucose levels (behaviour) because of thoughts (cognition) and fears (emotion) about having hypoglycaemia.

We were interested to find out if diabetes nurses could be trained to deliver these psychological treatments effectively, because not only is it not always possible to access a psychologist or psychotherapist, but also nurses may be best placed to deliver integrated diabetes and psychological care.

Study design and results

We recruited 344 adults with type 1 diabetes across eight diabetes centres in the UK. Participants had to have had diabetes for at least 2 years, an HbA_{1c} level of 8.2%–15%, and no complications of diabetes or other severe medical conditions. The full methodology and results have been described elsewhere (Ismail et al, 2008).

Participants were assigned to receive either MET, MET plus CBT, or usual care. We developed training packages for nurses to acquire diabetes-specific skills in MET and CBT, which took 3–6 months, and we tested their competencies in delivering each of these treatments. Participants who received MET alone had four sessions over 2 months, and those who received MET plus CBT had 12 sessions over 6 months. Data on change in HbA_{1c} levels over 12 months, hypoglycaemic episodes, depression, quality of life, diabetes self-care activities and weight were collected.

About 11% of participants did not return for HbA_{1c} measurements at 12-month follow-up. Those who received MET plus CBT had a greater decrease in HbA_{1c} levels than those who received usual care by nearly 0.5 percentage points. Those who received only MET did not have better glycaemic control than people who received usual care. None of the other outcomes differed among the three groups. People with worse control and who were younger tended to have greater reductions from baseline.

Conclusions

Combined psychological therapies (MET plus CBT) resulted in clinically relevant improvements in blood glucose control in type 1 diabetes compared with usual care. This study was unable to determine the effect of CBT alone.

This study demonstrates that diabetes professionals can be trained in psychological treatments to a high standard. We hope that these findings can be replicated in routine clinical practice in the future, so that other people with diabetes may benefit from improved glycaemic control. ■

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