



# FOCUS ON RESEARCH

## TITLE

### Researchers

Dr Andrew Keen, Professor Stewart Mercer, Professor Margaret Maxwell, Dr Ann Gold, Professor Marij de Bruin

### Aim

To establish if a large scale, definitive study of a tailored mindfulness-based group intervention, with self-management activation embedded within the programme structure, for adults with diabetes and significant emotional distress was feasible, justified, and potentially cost-effective

### Project Outline/Methodology

The study used a Medical Research Council framework to assess strengths and weaknesses of the study design, including the attractiveness of the intervention, and acceptability and utility of the measures of anxiety, depression (HADS), psychological wellbeing (WEMWBS), quality of life (EQ-5D), health care use and diabetes control (HbA1c). Participants were recruited in Aberdeen and Glasgow, initially in secondary care and later in general practices. Letters of invitation were sent from diabetologists and GPs, posters displayed, and adverts placed in the press. We aimed to recruit 20 participants at both sites randomly allocating 10 to receive the intervention immediately and 10 at a later date. The poorest controlled 40% of people with Type 1 and Type 2 diabetes with at least subclinical levels of anxiety or depression were invited to take part. The intervention was reflective of standard mindfulness-based cognitive therapy (MBCT) with additional elements designed to address problematic diabetes-related cognitions and behaviours. The MBCT consisted of 8 weekly 2-hour meetings, with daily 30-minute practices to be conducted at home either using CDS or an online platform.

### Key Results

Recruitment of adults with Type 1 diabetes in secondary care was not sufficiently successful, so the research team included people with Type 2 diabetes receiving diabetes care from GPs. A total of N=29 participants were recruited. 90% of recruits were at least 40 years of age, and 62% were female. The most successful recruitment method was letters from diabetologists (Aberdeen=2.6%, Glasgow= 1.8%)

and GPs (Aberdeen=1.7%, Glasgow=1.0%) providing diabetes care. 58% of participants attended at least 4 group meetings. Self-reported data and statistics gathered from the online platform indicated that participants varied in the extent to which they conducted mindfulness practices at home. The mean number of weekly home practices in those who attended at least 50% of classes was 3.9. Collection of questionnaire and medical data was successful, with the exception of those who dropped out of the study.

### Conclusions

It is not feasible to run a definitive MBCT trial focused on adults with Type 1 diabetes who have poorly controlled diabetes and at least subclinical levels of anxiety or depression. This is because of the relatively small size of the clinical population and their limited natural level of interest in mindfulness. It is feasible to run a definitive study in people with Type 2 diabetes in primary care however because the population is nine times larger.

### What does this study add to the field?

This was the first study to use a tailored MBCT intervention to both improve diabetes control and emotional wellbeing in people with diabetes who were poorly controlled and were experienced at least subclinical levels of anxiety or depression. It is clear future efforts in this area to conduct RCTs should focus on Type 2 diabetes.

### Implications for Practice or Policy

A relatively small group of people with diabetes are naturally interested in mindfulness-based approaches. However, it is likely that we will need a range of treatment modalities, which can be matched to need and personal preferences.

### Where to next?

A larger trial of a tailored MBCT intervention aimed at both treating anxiety and depression, and helping people better self-manage their Type 2 diabetes is required.

### Further details from:

Dr Andrew Keen, Consultant Health Psychologist, NHS Grampian. Email: [a.keen@nhs.net](mailto:a.keen@nhs.net)