

PRACTICE

UNCERTAINTIES PAGE

Does mindfulness based cognitive therapy prevent relapse of depression?

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This is one of a series of occasional articles that highlight areas of practice where management lacks convincing supporting evidence. The series adviser is David Tovey, editor in chief, the *Cochrane Library*. This paper is based on a research priority identified and commissioned by the National Institute for Health Research's Health Technology Assessment programme on an important clinical uncertainty. To suggest a topic for this series, please email us at uncertainties@bmj.com.

Depression typically runs a relapsing and recurrent course.¹ Without ongoing treatment people with recurrent depression have a very high risk of repeated depressive relapses throughout their life, even after successful acute treatment. Major inroads into the substantial health burden attributable to depression could be offset through interventions that prevent depressive relapse among people at high risk of recurrent episodes.² If the factors that make people vulnerable to depressive relapse can be attenuated, the relapsing course of depression could potentially be broken. Currently, most depression is treated in primary care, and maintenance antidepressants are the mainstay approach to preventing relapse.³ The UK's National Institute for Health and Clinical Excellence (NICE) recommends that to stay well, people with a history of recurrent depression should continue taking antidepressants for at least two years. However, many patients experience side effects, and some express a preference for psychosocial interventions, which provide long term protection against relapse.⁴ Mindfulness based cognitive therapy (MBCT)⁵ was developed as a psychosocial intervention for teaching people with a history of depression the skills to stay well in the long term (see box for a description of MBCT).

A recent systematic review and meta-analysis of six randomised controlled trials (n=593) suggests that MBCT significantly reduces the rates of depressive relapse compared with usual care or placebo, corresponding to a relative risk reduction of 34% (risk ratio 0.66, 95% confidence interval 0.53 to 0.82).⁶ However, despite the emerging evidence base⁶ and widespread clinical enthusiasm for MBCT,⁷ several uncertainties remain.

What is the evidence of the uncertainty?

Firstly, it is not clear how MBCT compares with other approaches to preventing depressive relapse—most notably, maintenance antidepressants. Evidence from two of the six randomised controlled trials included in systematic review mentioned above suggests that MBCT was at least as efficacious as maintenance antidepressants in preventing relapse (risk ratio 0.80, 95% confidence interval 0.60 to 1.08),⁶ but the sample sizes were small and the confidence intervals were wide. Even though antidepressants are the first line approach to preventing depressive relapse, no trials have yet evaluated whether the combination of antidepressants and MBCT provides added benefit over either treatment alone. There are also no head to head trials comparing MBCT with other psychosocial approaches known to help people stay well in the long term (such as cognitive behavioural therapy and interpersonal therapy).

Secondly, although the six randomised controlled trials have not yet reported adverse effects, neither have studies explicitly explored in any depth MBCT's acceptability in a broad range of populations. The earliest two trials of MBCT provided evidence through retrospective analyses suggesting that MBCT may be effective only for people who had had three or more episodes of depression.⁶ As a result, subsequent trials have restricted their sample to patients with three or more previous episodes. Future research is needed to establish how acceptable MBCT is to a broad range of patients

Thirdly, even though it is nearly 10 years since NICE first recommended MBCT and even though the 2009 NICE update identified the therapy as a key priority for implementation, there is a substantial gap between the efficacy research and implementation in routine practice settings. A recent survey suggests that only a small number of mental health services in the UK have systematically built MBCT into their depression care pathways.⁸

Description of mindfulness based cognitive therapy

Mindfulness based cognitive therapy (www.bemindful.co.uk/mbct/about) is a psychosocial, group based, relapse prevention programme for people with a history of depression who wish to learn long term skills for staying well. It combines systematic mindfulness training—meditation exercises targeted at enhancing awareness and developing self compassion—with elements from cognitive behavioural therapy.

MBCT is based on a theoretical premise similar to that on which cognitive behavioural therapy is based, and it uses strategies from that therapy too. However, MBCT helps people to learn that the negative thoughts that can signal the start of a depressive episode are fleeting events in the mind that they can choose to engage with or not. Through the mindfulness course people learn new ways of responding that are more self compassionate, nourishing, and constructive. This is especially helpful at times of potential depressive relapse, when patients learn to recognise habitual ways of thinking and behaving that tend to increase the likelihood of relapse and can choose instead to respond adaptively.

Methods

We identified relevant studies and ongoing trials by searching Embase, PubMed, PsycINFO, Web of Science, Scopus, and the Cochrane Central Register of Controlled Trials using the keywords “mindfulness-based cognitive therapy” or “MBCT” and “depress”.

Is ongoing research likely to provide relevant evidence?

Many of the uncertainties are answerable through well designed and adequately powered studies (see “Recommendations” box); indeed, in many cases this research is under way. Three ongoing randomised controlled trials—in the UK,⁹ the Netherlands,¹⁰ and Australia¹¹—ask how MBCT compares with, or can augment, antidepressants in terms of preventing depressive relapse. All three trials recruit from the population of adult patients with a history of three or more episodes of depression who are currently in remission, and all the trials report time to depressive relapse as their primary outcome. The UK’s PREVENT trial compares MBCT plus tapering or discontinuing maintenance antidepressants with maintenance antidepressants alone in terms of preventing depressive relapse or recurrence over 24 months.⁹ The Netherlands MOMENT study comprises two parallel trials: the first trial compares maintenance antidepressants with MBCT plus maintenance antidepressants; the second compares MBCT plus tapering of maintenance antidepressants with MBCT plus maintenance antidepressants.¹⁰ The primary outcome is relapse or recurrence over 15 months. The Australian DARE trial is a single blind trial using group comparison between MBCT and self monitoring (“depression relapse active monitoring”); relapse over 24 months is the outcome measure.¹¹

However, these randomised controlled trials are not comparing MBCT directly with other psychosocial interventions. A further trial will compare MBCT with cognitive psychoeducation, an equally plausible cognitive treatment delivered by the same therapists and which does not require participants to practise meditation.¹²

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- Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *Lancet* 2007;370:851-8.
- Munoz RF, Cuijpers P, Smit F, Barrera AZ, Leykin Y. Prevention of major depression. *Annu Rev Clin Psychol* 2010;6:181-212.
- Geddes JR, Carney SM, Davies C, Furuoka TA, Kupfer DJ, Frank E, et al. Relapse prevention with antidepressant drug treatment in depressive disorders: a systematic review. *Lancet* 2003;361:653-61.
- Hunot VM, Home R, Leese MN, Churchill RC. A cohort study of adherence to antidepressants in primary care: the influence of antidepressant concerns and treatment preferences. *Prim Care Companion J Clin Psychiatry* 2007;9(2):91-9.
- Segal ZV, Williams JMG, Teasdale JD. Mindfulness-based cognitive therapy for depression: a new approach to preventing relapse. Guilford Press, 2002.
- Piet J, Hougaard E. The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: a systematic review and meta-analysis. *Clin Psychol Rev* 2011;31:1032-40.
- Williams JM, Kuyken W. Mindfulness-based cognitive therapy: a promising new approach to preventing depressive relapse. *Br J Psychiatry* 2012;200:359-60.
- Crane R, Kuyken W. The implementation of mindfulness-based cognitive therapy: Learning from the UK health service experience. *Mindfulness* 2012; doi:10.1007/s12671-012-0121-6.
- Kuyken W, Byford S, Byng R, Dalgleish T, Lewis G, Taylor R, et al. Study protocol for a randomized controlled trial comparing mindfulness-based cognitive therapy with maintenance anti-depressant treatment in the prevention of depressive relapse/recurrence: the PREVENT trial. *Trials* 2010;11:99.
- Huijbers MJ, Spijker J, Rogier A, Donders T, van Schaik DJF, van Oppen P, et al. Preventing relapse in recurrent depression using mindfulness-based cognitive therapy, antidepressant medication or the combination: trial design and protocol of the MOMENT study. *BMC Psychiatry* 2012;12:125.
- Shawyer F, Meadows GN, Judd F, Martin PR, Segal Z, Piterman L. The DARE study of relapse prevention in depression: design for a phase 1/2 translational randomised controlled trial involving mindfulness-based cognitive therapy and supported self monitoring. *BMC Psychiatry* 2012;12:3.
- Williams JMG, Russell IT, Crane C, Russell D, Whitaker CJ, Duggan DS, et al. Staying well after depression: trial design and protocol. *BMC Psychiatry* 2010;10:23.
- National Institute for Health and Clinical Excellence. Depression: the treatment and management of depression in adults (update). (Clinical guideline 90). 2009. <http://guidance.nice.org.uk/CG90>.

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Recommendations for further research

- Among patients at high risk for depressive relapse, how does MBCT compare with maintenance antidepressants alone or both treatments together in preventing relapse? Can MBCT provide an alternative for people wishing to discontinue antidepressants?
- Among patients at high risk of depressive relapse, how does MBCT compare with other psychosocial approaches (such as cognitive behavioural and interpersonal therapies) in preventing relapse?
- How acceptable is MBCT to a broad range of patients (for example, patients with different sociodemographic and cultural backgrounds and patients with varied psychiatric and medical comorbidities)? Can the early indications that MBCT is effective only for patients with three or more previous episodes be replicated?
- What are the facilitators and barriers to implementation of NICE's recommendations for MBCT in the UK's health services? Can this knowledge be used to develop an implementation plan for introducing MBCT consistently into NHS service delivery?

What should we do in the light of the uncertainty? Practical advice on referring patients for MBCT and on commissioning such services in the UK*

How do I know when to refer someone for cognitive behavioural therapy, interpersonal therapy, or mindfulness based cognitive therapy?

All three psychosocial treatments are recommended by NICE, but cognitive behavioural and interpersonal therapies aim to help patients with current depression get well and stay well. MBCT might therefore be considered for people who are well but still at substantial risk of relapse—that is, those who have experienced three or more previous episodes of depression. This includes people who have relapsed despite antidepressant treatment; who cannot or choose not to continue antidepressant treatment; and/or who have residual symptoms. Such patients may present asking for long term support in the management of their depression or feel at risk of having future relapses after drug or psychological treatment.

MBCT is best suited to people interested in a psychosocial approach to preventing future episodes of depression who are open and willing to learn new ways of thinking and behaving and to learn within a group based context, and who can invest the time both to attend the groups and to do the home practice.

What can referrers and patients expect from a MBCT service?

- MBCT is a group based class (8-15 participants). It involves eight weekly classes, each lasting two hours, facilitated by a teacher who meets the UK's *Good Practice Guidelines for Teaching Mindfulness-based Courses* (<http://mindfulnessteachersuk.org.uk/>).
- MBCT therapists would normally meet patients individually, before the classes start, to assess suitability for MBCT and to provide the opportunity to explain more about the course and provide practical details.
- During the course, patients are asked to engage in about an hour a day of home practice to support their learning, supported by audio-recorded, guided meditation practice sessions.
- After the course many services offer booster or reunion sessions, typically monthly or quarterly.

Commissioning depression services

To manage the typically recurrent course of depression, services should offer—as part of the care pathway for depression—MBCT to help people to stay well

*Based on the current NICE guidelines¹³