

The Clinical Effectiveness of Mindfulness-Based-Cognitive Therapy: A Brief Review

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Mindfulness training and mindfulness-based therapies (MBT) have been increasingly used in the last 10 years as a psychotherapy to help adults (and more recently children and adolescents) with certain health conditions and psychological disorders. MBT is considered part of the third-wave of cognitive-behavioural therapies, with mindfulness exercises incorporated into widely used therapies like Dialectical Behaviour Therapy (DBT) and Acceptance and Commitment Therapy (ACT)^{1 6}. This brief review of the literature focuses on the evidence-base that has emerged over recent years in regard to more structured group programs such as mindfulness-based stress reduction² (MBSR), and in particular mindfulness-based cognitive therapy³ (MBCT). These quite similar programs hold great promise as cost-effective modes of treatment delivery. Research suggests that they may be relevant to a wide range of disorders, and are thus becoming more attractive treatment options for settings where treatment supply/demand problems exist. The primary aim of this review is to describe the current evidence-base for MBCT in relation to its potential benefits, applicability and effectiveness for outpatient settings that cater for individuals with a wide range of mental health problems. In addition, this review provides a brief overview of the form of clinician training that is likely to be necessary in order to maximise the effective delivery of MBCT programs.

John Kabat-Zinn's MBSR program² was the first mindfulness group program to be developed and scientifically evaluated. MBSR aims to help patients with chronic pain and health problems learn ways to manage and reduce stress and negative moods. A number of reviews support the effectiveness of MBSR and more recently MBCT for a range of disorders^{1 4 18}. For example, these reviews showed that mood symptom improvements were consistently observed (medium to large effects) for anxiety disorders, depression, pain disorders, cancer, and health conditions like chronic fatigue and diabetes. MBCT is the more recently developed program, and while similar in content to MBSR, differs in terms of its focus on depression and delivery within a cognitive therapy paradigm. The program includes psychoeducation and exercises aimed at preventing depression relapse for adults who have had 3 or more previous episodes of depression and are in the recovery/remission phase. Both MBSR and MBCT involve 8 weekly 2-hour sessions delivered in group format. Group sizes can often range from 4 or 5 adults to 12 adults or more. Regular meditation is a central feature of both programs, which have core aims of developing a more present focused and non-judgmental stance towards experience. According to Segal, Williams and Teasdale³, MBCT involves practices that allow de-centering and disengagement from habitual and repetitive patterns of thinking (e.g., rumination, worry) that can maintain negative emotions and maladaptive coping responses. It is purported by Williams⁵ and other prominent cognitive-behavioural theorists⁶ that rumination and worry are key transdiagnostic factors involved in the maintenance of a number of mood related disorders.

In support of the clinical effectiveness of MBCT for mood disorders, randomised control trials (RCTs) have shown MBCT is effective at reducing the rate of relapse and residual symptoms for adults with chronically recurring depression and in reducing symptoms for bipolar disorder patients that are currently stable^{7 8 10 13 28}. Some of these trials suggest relapse rates can be reduced to about 50% in the first 12-months after treatment completion. More recently, Barnhofer and colleagues⁹ have shown that MBCT can not only

prevent relapse, but also successfully reduce symptoms (large reductions from severe to mild range on the Beck Depression Inventory) in patients with recurrent depression and who were currently symptomatic. Similarly, uncontrolled trials have yielded symptom improvements in the medium to large effect size range for outpatient samples that involve diagnoses of treatment resistant depression, general anxiety disorder, and mixed anxiety and mood disorders^{12 14 16}. These trials provide supportive evidence that MBCT is clinically applicable to clients with a range of severe and chronic mental health problems who are typically referred to Community Mental Health Services for clinical psychology interventions. Moreover, while the evidence is only preliminary, MBCT appears to be associated with good patient acceptability¹⁵ and modest attrition rates^{15 17 26} that stand up well when compared to other forms of group CBT programs delivered in an outpatient setting¹⁸. Based on the current research findings, NICE (2004, National Institute of Clinical Excellence) guidelines in the United Kingdom have recommended that MBCT is a treatment of choice for preventing depression relapse.

Consistent with the previous findings, a very recent and robust meta-analysis performed by Hoffman and colleagues¹⁸ showed that MBT (mainly MBCT and MBSR) for adults with a primary problem of anxiety and depression was associated with average symptom improvements in the large effect size range. In addition, those patients with health related problems also showed significant improvements in anxiety and depression symptoms in the medium effect range. Their analysis showed that MBT was associated with improvements across a wide range of disorders at varying levels of severity, with improvements generally maintained at follow-up. They concluded that the effects observed are consistent with the view that the benefits of MBT are transdiagnostic in nature. That is, MBTs appear to address emotional and cognitive processes underlying the maintenance of a range of disorders, and therefore can have a broad range of applicability. For example, there is emerging evidence that MBT is useful for insomnia^{19 20}, with clinical trials already under way to investigate its efficacy²². Insomnia is a frequently occurring disorder, often comorbid with a number of disorders, and is a factor associated with the onset of depression²³.

Over the last few years some support has also emerged for the potential benefits of MBTs for children and adolescents. Preliminary research suggests MBT in modified forms can be acceptable and feasibly delivered to younger people that experience certain types of mental health problems. In a comprehensive review of the recent evidence base, Christine Burke has outlined how MBT studies have yielded positive effects for adolescents experiencing a variety of emotional and behavioural problems²⁴. MBT in age appropriate form has also been delivered to younger children (5 to 12 years) in both clinical and non-clinical populations. Areas investigated and being investigated include: sleep and worry problems; attention deficit and hyperactivity disorder; externalising disorders (e.g., conduct problems); adolescent depression; and learning difficulties. For example, a recent RCT compared MBSR to treatment as usual (TAU) in an outpatient facility for adolescents with multiple diagnoses. The researchers found that MBSR resulted in significant reductions in anxiety, depression and somatic symptoms relative to TAU²⁵. However, to the present time the research base is very small and methodologically limited. Firm conclusions cannot be confidently drawn about mindfulness training as an efficacious treatment for child and adolescent mental health problems. Further well-designed and controlled studies are required across a range of disorders and age groups.

While the emerging body of evidence is supportive of the clinical effectiveness of MBTs, there is some evidence that certain individual factors are associated with attrition, and it has been argued that outcomes are highly dependent on the competence of treatment delivery. In the case of attrition, Crane and Williams²⁶

have noted from past trials of MBCT that attrition rates are comparable to CBT trials. However, MBCT research trials have often been delivered in research clinic settings, under controlled conditions, with homogenous populations, and by highly trained clinicians. As they suggest, it remains somewhat unclear as to how well MBCT can be effectively delivered in more routine mental health setting with harder-to-treat clinical groups with a more severe psychiatric history or higher residual symptoms. As such, they analysed data from a number of MBCT clinical trials and found that when a patient drops out of MBCT it tends to be early in the program (usually before treatment started or by the end of session one). Higher depressive rumination and brooding, lack of antidepressant use, and increased cognitive reactivity (poor problem solving when mood drops) predicted attrition. They suggest that it may be necessary during assessment for mindfulness-based clinicians to identify these types of individuals and help them to develop realistic expectations about treatment and some strategies to help manage negative emotion that may arise early in the program.

In light of the matter of MBCT facilitator competence, Crane et al.²⁷ argue that effective delivery of MBCT requires rigorous training so that facilitators/clinicians can embody a mindfulness based approach and stance towards difficult internal and external experiences. Mindfulness training is to a very large extent experiential in nature and involves a large amount of mindfulness meditation practice that is learned in a specific context. They propose from the reports of advanced clinicians that mindfulness-based clinicians need to have a well developed personal mindfulness practice in order to facilitate mindfulness in others. Crane and colleagues have put forward a three stage MBCT training framework that involves foundational training, basic training, and advanced training. While at the moment there is little empirical evidence to support the necessity of such a training framework to enhance effectiveness of treatment delivery, as they outline, there is a large body of clinically-based literature that suggests MBTs draw a significant amount of their effect through in-class interactions between facilitator and clients.

In summary, MBT has a growing evidence-base supporting its efficacy and effectiveness for reducing symptoms for a range of clinical disorders. MBCT appears especially efficacious for preventing relapse in recurrent depression, with a growing body of evidence suggesting it can be beneficial for treatment resistant depression and other mood disorders. Some very preliminary evidence suggests that MBCT might also hold some benefit for more chronic or severe clinical populations, although more research is required before strong conclusions can be drawn. It appears that adults with more dysfunctional levels of rumination and coping response are more prone to dropout from treatment prematurely, although the rate of attrition does not appear to be any higher than other evidence-based treatments. Despite such limitations, MBTs appear to have effects that are transdiagnostic. Moreover, the brevity of treatment length, session by session manual, and group format lends MBCT to wider dissemination and therefore make it an attractive form of therapy in clinical settings where treatment supply/demand and resource limitations exist. While empirically supported therapies like CBT remain the gold standard psychotherapy for mood disorders, perhaps MBCT might be considered as a cost-effective treatment option within a stepped-care model of treatment delivery. That is, less complex and severe client populations might be offered MBCT as an initial treatment option. In contrast, more complex and severe clients might be offered individual therapy options, with MBCT offered at a later stage for residual symptom reduction and relapse prevention. However, it seems likely that effective MBCT delivery requires a high level of clinician training in the fundamentals of mindfulness practice.

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