



UNIVERSITY OF LEEDS

This is a repository copy of *Implementing Mindfulness-Based Cognitive Therapy (MBCT) as mindfulness skills courses offered as an adjunct to individual therapy: a feasibility and effectiveness study of mixed staff and patient groups in secondary care.*

White Rose Research Online URL for this paper:
<http://eprints.whiterose.ac.uk/101869/>

Version: Accepted Version

Article:

Hortynska, K, Masterson, C, Connors, L et al. (2 more authors) (2016) Implementing Mindfulness-Based Cognitive Therapy (MBCT) as mindfulness skills courses offered as an adjunct to individual therapy: a feasibility and effectiveness study of mixed staff and patient groups in secondary care. *The Cognitive Behaviour Therapist*, 9. e8.

<https://doi.org/10.1017/S1754470X16000040>

© 2016, British Association for Behavioural and Cognitive Psychotherapies. This article has been accepted for publication and will appear in a revised form in the *Cognitive Behaviour Therapist*, published by Cambridge University Press.

Reuse

Unless indicated otherwise, fulltext items are protected by copyright with all rights reserved. The copyright exception in section 29 of the Copyright, Designs and Patents Act 1988 allows the making of a single copy solely for the purpose of non-commercial research or private study within the limits of fair dealing. The publisher or other rights-holder may allow further reproduction and re-use of this version - refer to the White Rose Research Online record for this item. Where records identify the publisher as the copyright holder, users can verify any specific terms of use on the publisher's website.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

Implementing MBCT as Mindfulness Skills Courses offered in adjunct to individual therapy: a feasibility and effectiveness study of mixed staff and patient groups in secondary care.

Abstract

There is growing evidence regarding the effectiveness of mindfulness-based interventions offered to diagnostically diverse groups of participants. This study examined the feasibility and effectiveness of adapted Mindfulness-Based Cognitive Therapy (MBCT) groups offered to NHS patients in a secondary care Psychology and Psychotherapy Service. The group was run as an adjunct to individual therapy and accepted referrals from all therapists in the service, so participants had experienced a range of therapeutic approaches prior to attending the group. The 9 groups run during the project also included staff participants, as part of a capacity building strategy. Results indicate high levels of acceptability, with low drop-out rates. Standardised outcome measures were used to examine the effectiveness of the group, and patient participants demonstrated improvements which were statistically significant. Qualitative feedback from group participants and referrers was positive. The findings support implementation of MBCT as part of a package of psychological therapy interventions. Further research regarding this form of MBCT is discussed.

Keywords: Mindfulness; group intervention; mixed presentations; staff

Learning objectives

1. To enhance practitioners' awareness of the adaptability of MBCT intervention and its potential compatibility with other therapeutic approaches
2. To provide practice-based evidence for the feasibility and potential benefits of implementation of MBCT with heterogeneous populations
3. To encourage implementation of MBCT in secondary care NHS settings across adult and older adult populations

Introduction

The popularity of mindfulness-based interventions is reflected in the increasing number of evaluations of the approach in different service settings. Although MBCT is not currently recommended by NICE (2004;2009) as a 'first line' treatment for disorders other than prevention of relapse in depression, there is growing evidence that mindfulness-based interventions are effective for a range of psychological disorders (see the meta-analytic reviews of Khoury et al, 2013 and Hofmann et al, 2010). There is also increasing interest in

the role of mindfulness-based interventions in preventing or reducing work related stress and burnout in the health care professions (e.g. Marx et al, 2014; Ruths et al, 2012).

MBCT is a skills-based intervention held over 8 weeks in a group format. In sessions lasting about two hours, participants are taught mindfulness skills as well as strategies drawn from cognitive behavioural therapy. Group participants are asked to make a significant commitment to practice at home (45min a day). Mindfulness training teaches people to access the 'being mode' of mind by attending to experience moment by moment with openness and non-judgement, so that narratives triggered by low mood or anxiety are not treated as real threats or losses and therefore do not need to be dealt with using the 'doing mode' of mind, which can increase levels of rumination, suppression, distress or sense of hopelessness (Surawy et al, 2014). The underlying principles behind MBCT are the same regardless of depressive or anxious presentation.

Our secondary care Psychology and Psychotherapy Service (PPS) treats a full range of complex mental health problems (with the exception of co-morbid substance misuse) and we wanted to make MBCT available to all, regardless of diagnosis. There is practice-based evidence supporting the potential effectiveness of using mindfulness-based interventions in patients with mixed presentations in primary care (Finucane & Mercer, 2006; Radford et al, 2012) and secondary care (Green & Bieling, 2012). Although this evidence comprises uncontrolled service evaluations with relatively small numbers of participants, a recent RCT has provided evidence of the effectiveness of a mindfulness-based group intervention for mixed presentation groups (Sundquist et al, 2015). Discussing mindfulness-based interventions for mental health problems, Mace (2008) suggested a focus on "what the service user is seeking relief from", rather than diagnostic categories. He suggested classification based on categories of unwanted experiences, such as "moods (anxiety, depression, anger); intrusions (ruminations, hallucinations, memories); behaviours (binging, substance dependence, violence, physical self-harm)" (p.86). According to Buddhist psychological models, attempted avoidance of the difficult or unpleasant experiences and clinging onto pleasurable experiences are two of the common sources of suffering (Grabovac & Lau, 2011). This view allows applicability of mindfulness-based approaches to a variety of presenting problems and has additional normalising value, promoting awareness of the challenges of being human instead of focusing on concepts of pathology. We therefore made the decision to offer trans-diagnostic groups, focused on developing skills in mindfully relating to inner experiences, whether unwanted emotions, thoughts or bodily sensations.

Demarzo et al (2014) describe mindfulness-based intervention as a "complex intervention" which therefore requires innovative approaches and delivery models to be implemented. Perhaps unsurprisingly, Crane and Kuyken (2012) report that an expert within the service increases the chances of successful implementation. Setting up MBCT provision within our service was related to the first author having prior expertise in mindfulness-based

interventions, including having completed doctoral level research into mindfulness. In our service, it was clear that the ongoing implementation of MBCT would require training more staff; therefore we decided to run groups that included staff as participants. Good practice guidelines emphasise the need for clinicians' personal practice (Good Practice Guidelines for Mindfulness-Based Teachers, 2011) so we offered staff the opportunity to participate for 3 reasons: to build capacity for mindfulness-based interventions within the service; to increase understanding of mindfulness-based interventions (therefore enabling support for patients using the approach); and to offer the opportunity for self-practice to staff, which has been shown to reduce stress (Marx et al, 2014).

The focus of MBCT is on learning skills rather than discussing individuals' life history and presenting problems, and there is limited scope for monitoring risk. Since the patients of our PPS are highly complex and often present with ongoing suicidal ideation or deliberate self-harm, it was agreed that the referring clinician would hold the responsibility for managing risk. MBCT was therefore an adjunct to individual therapy, although therapy appointments were suspended or finished except for planned follow up appointments. We hoped that patients would benefit from learning skills in mindfully relating to their difficulties (for some this was considered to be part of relapse prevention but that was not necessarily the aim). We were keen to evaluate if offering this would be a useful addition to individual therapy regardless of therapeutic model used; our service might then offer a package of therapeutic intervention including mindfulness. As the MBCT groups were not intended to be a stand-alone treatment we called our groups mindfulness skills courses. To our knowledge there is no research investigating MBCT's compatibility with a range of psychotherapy treatment models. We decided that the emphasis on changing the awareness of and relationship with internal experiences (including thinking processes) would be compatible with the range of therapeutic approaches offered in our service (CBT including ACT, Compassion-Focussed Therapy and Behavioural Activation; EMDR; Family Therapy; Psychodynamic Therapy; CAT; and Integrative psychotherapy) therefore we accepted referrals from all practitioners. We also have not come across any literature on MBCT offered in addition to, or as a part of, an individual therapy intervention. Knowing that this may be a novel way of implementing MBCT, in addition to collecting evaluation and outcome data we collected feedback from referring clinicians regarding the group's compatibility with the therapeutic intervention they offered.

To enhance the relevance to a diagnostically diverse group of participants, the mindfulness skills course followed the outline developed by Alistair Smith and Lisa Graham called "MBCT for common mental health issues" which is an adaptation of the original MBCT manual (Segal et al, 2002). The sessions, homework tasks and main in-class practices are the same except for a stronger emphasis on mindful movement and stretching and a lesser emphasis on depressive symptoms in the fourth session, which instead focused on the overall impact the relationship between thoughts, emotions and bodily sensations. Further details of course structure and materials, including evaluation, are available on request. To facilitate

referrals we provided “Referral and Orientation Sessions” for staff. These sessions covered: within-service referral criteria; contraindications for mindfulness; hypothesised mechanisms; potential benefits; attitudes supportive of mindfulness practice; course content and themes for each class; compatibility with other therapeutic approaches; formal and informal practice requirements.

The first course was for clinicians only. This was intended as an initial capacity building activity and a way of facilitating mindfulness skills and knowledge development among staff, in line with Crane and Kuyken’s (2012) recommendations. Four staff (who had prior mindfulness practice ranging from 1-17 years) from that initial group then co-facilitated the later courses while receiving mindfulness supervision. The lead facilitator (KH) has completed Teacher Development Training level 1 and 2, Mindfulness Supervision training and has an established meditation practice of 9 years duration. Throughout the courses she was receiving regular supervision from a senior MBCT supervisor and trainer.

In total we ran 9 groups, with 6 to 11 participants in each group. One or 2 spaces per group were available for staff, who were accepted onto courses after attending a “Taster and Information” session or after individual discussion with the main course facilitator. Staff participants were interested in developing their own mindfulness practice and supporting their patients’ practice; it was understood that attending the group would not equip them to run MBCT courses (although it may be a first step on the journey of becoming a mindfulness facilitator). We thought that having staff and patients participating together had additional de-stigmatising value.

This form of MBCT provision was offered as a pilot. Whilst we had some evidence to support our decision to include both staff and patients in the groups (Morehead, 2012), we took the risk of assuming that it could be beneficial to patients of our service regardless of their presenting difficulties and the therapeutic model being used in their individual therapy. We wanted to evaluate the intervention while it was being provided and to use feedback to improve the service. This project was therefore registered as a Service Evaluation Project with our local Research and Development Department. Ethical approval was not required as the project involved an evaluation of psychological service provision using information collected as part of routine clinical practice.

Procedure

Each participant was offered a 1 hour individual “Assessment and Orientation” session before starting the 8 week mindfulness skills course. This allowed discussion of how and why developing skills in mindfulness may be helpful, in line with their individual formulation. It was an opportunity to explain to participants the commitment required (45min of practice for 6 days a week) and to agree on responsibilities and strategies in case any difficulties

arose during the program. During these sessions patients were screened for suitability, informed of the evaluation procedures and reminded that they did not have to complete the self-report measures or feedback forms if they did not wish to.

Commitment to attend all the classes was emphasised and prospective participants were informed that if 2 classes were missed within the first 4 this would trigger a discussion about their ability to continue; if 3 sessions were missed they should not continue with the course as it would be too difficult to develop the intended skills. In such cases, if appropriate, they would be offered an opportunity to join the next available course if they wished.

Outcome measures were completed at the start of session 1 and at the end of session 8; the qualitative feedback forms were completed in the final session (by participants) and sent to referrers after the course completion.

Outcome measures

The outcome measures used were those in use in the wider service. Full scale scores are reported due to our interest in whether the course impacted general levels of distress.

The Clinical Outcomes in Routine Evaluation measure (CORE; Evans et al., 2000) is a 34 item self-report questionnaire designed to assess a pan-theoretical 'core' of clients' distress. It is a global measure of distress covering clients' subjective wellbeing, commonly experienced problems/symptoms, and life/social functioning. Clinical scores range from 0 to 40. A higher score indicates a higher level of distress.

The Depression Anxiety and Stress Scale - Short Form (DASS-21; Antony, et al, 1998; Henry & Crawford, 2005) is a 21-item self-report measure of depression, anxiety and stress. Scores are doubled to allow comparison with the full-scale DASS. Total scores range from 0 to 126, with higher scores indicating more difficulties.

Evaluation measures

The feedback form for participants was closely based on material from the original MBCT manual (Segal et al, 2002) aimed to facilitate reflections among participants and to elicit qualitative feedback. Although most questions were originally intended to be used as prompts for discussion in pairs, we asked our participants to write down their answers afterwards. Questions included e.g.: *What did you want/hope for?; What have you learned/gained during the course?; What were the obstacles/costs to you?; What may help you in the future if you are in danger of becoming overwhelmed?; How important the course has been and why?* (which was rated on a 10 point scale).

A feedback form for referrers was designed by the first author (in collaboration with her mindfulness supervisor and the co-facilitators) in order to elicit perceived changes in the

participants' presentation and to assess the clinicians' opinions on the compatibility of the course with the therapy they were offering. It consisted of questions such as e.g.: *Any particular changes observed in your client's presentation since taking the course?; Do you think mindfulness added something to the individual therapy you offered?; To what extent in your opinion is mindfulness compatible with the form of therapy you have been offering and why?* (rated on a 10 point scale).

Participants

Patients

A total of 54 patient participants started the course; 35 were female and 19 male. The average age was 48 years (range 25-81 years); 9 participants were aged 65 or over. The average number of individual therapy sessions attended before starting the MBCT course was 13 (range 2-35.)

The average CORE score at the start of the course was 18 (range 5.3-27.9). The average DASS-21 score at the start was 61 (range 16-116).

To facilitate the trans-diagnostic focus of the groups both referrers and patients were specifically asked about the "presenting problem" as opposed to diagnostic category. Problems included: recurrent depression; anxiety; PTSD symptoms; bipolar disorder; body dysmorphic disorder; history of early trauma; worries; rumination; panic attacks; work stress; obsessive-compulsive disorder; chronic pain; self-criticism; complex bereavement; self-blame; social anxiety; health anxiety; generalised anxiety; health problems; suicidal ideation; and intrusive thoughts.

Staff

A total of 16 staff attended the course. Despite recognising that many staff were participating in order to develop skills in using mindfulness with their patients, all were asked to identify personal reasons or problems they wished to focus on when attending the course. The main problems identified were: stress; being easily distracted; worries; anxiety; rumination; living in the future; racing mind; inability to relax; rushing; no energy; and sleep problems. Participants in the first "staff only" course were not asked to complete CORE, but in subsequent groups we decided to ask all participants to complete both measures. Staff data was not analysed for the current paper.

Results

Acceptability

A total of 62 referrals were made by 28 clinicians from PPS. The majority of referrals (37) came from CBT-inclined therapists. 10 patients were referred by CAT therapists, 10 by psychodynamic therapists and 3 by Integrative therapists. One referral came from the Family Therapy Service and one was a result of a neuropsychological assessment.

All 62 referred patients were offered an assessment appointment. Three patients did not attend their assessments. Post-assessment, one patient was deemed to be unsuitable; four were offered a place on the program, but did not attend. Therefore, a total of 54 patients started the course.

Attendance and drop-out

In total there were 347 attendances out of 432 possible for patient participants (80% attendance rate). 46 patient participants (85%) attended at least 5 sessions.

All staff participants completed the course. Of the 54 patient participants, 7 dropped out before completing the course (13%). Reasons for drop out included ill health (3); worsening in mental health (2); problems in engaging in homework practice (1); and unknown (1).

Outcome measures

Complete pre- and post-MBCT data were available for 35 patient participants on the CORE and for 41 patients on the DASS. We checked that for both measures the pre-group and post-group data was normally distributed. Paired samples *t* tests were used to compare means and assess significance of outcomes.

A comparison of CORE scores revealed a reduction from pre-group (mean = 18.47, S.D.= 5.58) to post-group scores (mean = 14.87, S.D.= 7.02), indicating a reduction in distress. This difference was statistically significant ($t = 3.31, p < 0.002, r=0.50$) with a medium effect size ($d = 0.57, 95\% \text{ CI } [.20, .92]$). DASS scores also reduced from pre-group (mean = 60.68, S.D.= 22.71) to post-group (mean = 42.73, S.D.= 22.07), indicating a reduction in symptoms. This difference was statistically significant ($t = 5.35, p < 0.001, r=0.54$) with a large effect size ($d = 0.80, 95\% \text{ CI } [.46, 1.14]$).

Evaluation measures

We used thematic analysis (Braun & Clarke, 2008) to examine the key questions of interest from the feedback forms. The analysis of participants' written feedback comments (both patients and staff) revealed several main themes/ categories. Table 1 outlines the themes emerging from the question: *What did you want/ hope for? What was the main goal you wanted to achieve?*

Table 1. Themes and subthemes regarding hoped for changes

<u>Theme</u>	<u>Subthemes</u>
<i>Staying in the now</i>	<ul style="list-style-type: none"> • To learn about mindfulness and improve ability to use it to spend time in the “now” • To be more relaxed, more content with and connected to life as it is, to enjoy moments and time with family • To be able to let things go (e.g. memories, emotions) and live in the present moment
<i>Reducing or managing symptoms</i>	<ul style="list-style-type: none"> • To have more control over racing mind/thoughts/memories; to stop ruminating • To be able to cope better with stress/pain/anxiety/low mood • To reduce or better manage anxiety of varying form and intensity • To gain tools for staying well with depression • Other (weight loss, quitting smoking, lateness)
<i>Building strengths</i>	<ul style="list-style-type: none"> • To be more self-accepting/kind/confident • To develop self-awareness, to be able to help others (<i>staff participants</i>)

Table 2 outlines the themes identified in response to the question: *What have you learned/gained during the course?*

Table 2. Themes and subthemes regarding the benefits of the course

<u>Theme</u>	<u>Subthemes</u>
<i>Staying in the now</i>	<ul style="list-style-type: none"> • Becoming more connected to life, appreciating moments • Accepting now • Finding peace in breath
<i>Managing problems</i>	<ul style="list-style-type: none"> • Space to understand what is happening, relax the mind and stop negative loop • Becoming less anxious, striving, stressed, becoming calmer
<i>Changed awareness</i>	<ul style="list-style-type: none"> • Better understanding of self • Awareness of habitual responses, thought patterns, coming out of doing mode

-
- It's normal to have thoughts that wander

New skills

- Taking time for myself
 - Being less judgemental
 - It's for life
-

Responses to the question *How important out of 10 the course has been for you and why?* were available from 42 patients and 13 staff participants. The average score was 8.5 for patient participants and 7.7 for staff indicating that the program was experienced as important.

In line with these high ratings of importance, the qualitative answers to this question were overwhelmingly positive, indicating that participants found the course to be beneficial. The responses to this question echoed the above categories (table 2) and included the following examples (selected from 6 of those patient participants who gave permission for us to use their words in this paper):

It's completely changed my way of thinking, how I spend my time and how much I worry. It's made me recognise the importance of 'me time' and build this into my life. It's made me slow down, recognise the things in life I enjoy and learn to accept uncomfortable, unpleasant feelings. I also feel more confident as I am not constantly striving to be perfect at everything.

This course, in conjunction with other therapies, has given me the first time in 22 years to face up to the past with a realistic prospect of coping and accepting that the past is indeed the past and I cannot change it.

I have found it extremely helpful to be given practical help to spend some time on me. Having an excuse to shut the world off and just be by myself in the present moment is a great thing and will hopefully give me the grounding I need to carry on.

MBCT has helped me to focus on me and what I actually think and feel rather than what I think I should be thinking and feeling. It's helped me settle and ground myself through breathing practice. I feel that MBCT has given me a freedom to recognise that thoughts are just that.

Over the course of the course, I have grown, changed my thinking and outlook, developed an inner confidence and resilience in a way in which I could not have imagined. The course came at the right time for me – when I was ready to embrace a new approach to my life and find new ways to approach my issues. You have participated rather than taught the course, which has made the work even more powerful.

The course has shown me the tools to help cope with my negative thinking much more effectively and to realise how important it is not to live in the past or the future, but to be aware of enjoying the present for what it is. The meditation exercises help alter my automatic negative thought pattern. I didn't have any expectations that it would make any difference but I think it can help. It's also made me more aware of how self-critical I am and how damaging this can be.

Feedback from referrers

Alongside the impact on symptom reduction and value to participants we aimed to evaluate therapists' perception of the compatibility of MBCT with therapeutic interventions delivered in one to one format. 17 referring clinicians provided feedback on MBCT's compatibility, returning 27 feedback forms. 25 of these included numerical ratings the compatibility of MBCT with their therapeutic approach with the referred patient: 20 rated it extremely high (10/10) and 5 rated it as very high (8-9/10). See Table 3 for examples of the qualitative comments from these forms.

Table 3. *Examples of referrers' feedback*

Question	Example responses	Type of individual therapy offered
Overall impression? Any particular changes observed in client's presentation since taking the course?	<i>Mindfulness has helped my client learn different way of relating to her thoughts and feelings that seemed to be helping prevent relapse. This client had review appointments up to 4 months after the course and continued to be well, in fact improved further over this time.</i>	BA
	<i>My client had previous knowledge of mindfulness, for him it was about consolidation and opportunities for live practice with the benefit of a structured programme that has been invaluable. He is continuing to use what he has learned from the course. The group dynamics has been very beneficial in helping him confront some of his fears about group social situations, and has been a very adaptive, normalising and cathartic experience</i>	CBT
	<i>Very positive impact, good feedback. I noticed greater sense of ability to direct her mind and move more smoothly around anxieties rather than feeling overwhelmed by them. More connected and supportive of herself and committed to working to keep herself</i>	CAT/ Integrative

well.

Do you think mindfulness added something to the individual therapy you offered?	<p><i>The specific emphasis on prolonged skills practice. At times in therapy the process of formulating and understanding leaves less room for focussed experiential practice. Group offers an additional dimension of dealing with the experience of being with others in greater numbers that working 1:1 cannot.</i></p> <p><i>I do feel she needed rigorous practice to start to feel she could own her mind more and not feel so reactive to traumatic memories.</i></p> <p><i>I think it helped her better recognise when she was staring to ruminate or worry and to realise that she has an alternative to doing it.</i></p>	<p>CBT</p> <p>EMDR/ CFT</p> <p>BA</p>
To what extent mindfulness is compatible with the form of therapy you have been offering and why?	<p><i>It encourages people to work with what is rather than what they want it to be, and creates a space to reflect and observe, rather than immediately engage in old habitual ways of responding. It is a useful way to develop an adaptive behavioural response of just being with emotions and resisting the pull of particular trains of thought, after the initial cognitive work around verbally identifying existing rules and assumptions. The focus on the breath is also the basis of developing self compassion and self soothing so it can be a good primer for CFT too.</i></p> <p><i>The principles of mindfulness fit very well with my general approach in helping people develop a greater understanding and awareness of their internal processes and their ability to revise these.</i></p> <p><i>I think it is compatible as CAT is in part about the relationship with the self which seems to fit with mindfulness. It's about how we see ourselves and keeping an "observing eye" on us in the present.</i></p> <p><i>I think it fits extremely well with brief CAT consultation work which also aims to have strong focus on recognising patterns as they occur. It is good to offer 'package' of interventions rather than single one.</i></p>	<p>CBT</p> <p>Integrative/EMDR</p> <p>CAT</p> <p>CAT</p>

Discussion

The results of this evaluation provide initial evidence that MBCT is feasible and effective when delivered in a secondary care PPS to groups of mixed diagnosis patients, as an adjunct to a variety of therapeutic approaches. Our preparation of referrers appears to have been successful, with only 1 assessed patient not offered a place on the course. The course seems to have been an acceptable intervention to patients, with high levels of attendance and low dropout rates (cf Strauss et al, 2014, who report dropout rates of 8%-38% in RCTs).

Furthermore, our secondary care participants rated the course as important to them at a similar level to Radford et al's (2012) primary care patients. Qualitative feedback from both patients and referrers was mostly very positive, and indicates that MBCT can be offered as an adjunct to individual therapy of different types. Finally, despite the complexity of our participants' problems, statistically significant change was observed on outcome measures, which in conjunction with the qualitative feedback indicates that the course had a positive impact.

Although Teasdale et al (2003) caution against injudicious use of MBCT, they also recognise that mindfulness practice may positively affect processes common to different presentations. They stress the importance of individual formulations, both to improve outcomes and to prevent the possible adverse effects of mindfulness practice, and this was addressed in our assessment sessions. Our results indicate that, as a group, our diagnostically diverse participants experienced significant improvements in symptoms, which adds to the growing evidence supporting this way of offering MBCT (Radford et al, 2012; Green & Bieling, 2012). Strauss et al's (2014) meta-analysis of mindfulness-based interventions for people with a current episode of anxiety or depression found significant reductions in symptom severity for depressed patients, however, improvements in anxiety symptom severity were not statistically significant. The inclusion in our study of participants who would meet diagnostic criteria for anxiety disorders may therefore have weakened our findings. Given that our evaluation had good results, it could be that many of our patient participants had co-morbid depression and anxiety. Arch and Ayers's (2013) evaluation of a shortened mindfulness-based intervention for anxiety found that patients with significant depressive symptoms or uni-polar mood disorders had better outcomes at 3-month follow up than those offered a CBT intervention. In order for us to address these issues it would have been useful to collect full diagnostic data, however, this would not have fitted with our clinical approach.

As a service evaluation we did not have a comparison or control group, nor did we attempt to control for other factors which may have impacted participants' symptoms (other interventions, medication changes, life events etc) so we cannot definitively attribute the observed changes to the MBCT intervention. Furthermore, the quantitative analysis is based on group averages which disguise individual patterns of change: we know that three

participants' scores worsened on both measures over the course of the group. Whilst we know that most of the course participants were not receiving individual therapy at the same time as attending the course we did not formally record this, nor did we record use of other support accessed during the course. In hindsight, it would have been useful to use a measure designed to capture changes relating directly to the mindfulness intervention, such as the 5 Facets Mindfulness Questionnaire (Baer et al, 2006) to explore the relationship between mindfulness skills and changes in symptoms. It would also have been useful to collect information on mindfulness practice between the sessions as there is evidence that regular formal homework practice (i.e. 40min) a minimum of 3 times per week enhances the benefits obtained from attending the MBCT courses (Crane et al, 2014). The evaluation could have also benefitted from a more robust approach to collecting the symptom outcome measures; there were a number of problems with incomplete forms or missing data (e.g. ID number or date).

Our positive findings are likely to have been influenced by the referral of appropriate clients from interested clinicians who already had positive beliefs about the potential benefits of mindfulness, many of whom had completed an MBCT course themselves. We have considered whether there could be other reasons for our positive findings. The staff who participated had other work relationships with facilitators and may have been inclined to provide positive feedback in order to maintain good relationships. The positive nature of the qualitative feedback was possibly also influenced by the nature of the questions (e.g. "What have you learned/ gained during the course?") although we did also ask about obstacles and costs. It is possible that those patients who were most engaged in the course were the best at fully completing the outcome measures and those who dropped out did not complete later measures. Furthermore, we are aware that there is potential bias relating to participants' agreement to use their quotes in this paper: perhaps those who gave us permission to use their quotes had also given the most positive feedback. Finally, we are also aware that there is a potential for positive bias in the feedback provided by participants, given that the outcome and qualitative data were collected at the last session by the facilitators, although this ensured high levels of completion.

There is no follow up data at the time of writing, but we hope to collect follow-up data from patients to establish whether gains were maintained. A recent study indicates long-term maintenance of improvement in a heterogeneous group of primary care patients (Mitchell & Heads, 2015). We would also like to monitor re-referral rates to the service in order to establish whether there is a longer term impact of the intervention on the utilisation of services. This would allow these patients' data subset to be compared to a service norm. Findings from a recent study examining the impact of MBCT on care health utilisation (including A&E visits and psychiatric input) over a 7-year period suggest that MBCT can have the added benefit of reducing distress-related high health care utilization (Kurdyak, et al, 2014).

We would like to further explore the experience of our staff participants, as this sort of intervention has been shown to have good benefits for mental health staff (Marx et al, 2014; Ruths et al, 2012). Whilst ratings of the personal importance of participation in the MBCT course were generally high for both staff and patients, they were slightly lower for staff participants. This may indicate the mixed group format of delivery is less acceptable for them than for patients, as was the case in Moorhead's (2012) feasibility study of mindfulness groups for patients, staff and carers. However, it may simply be related to the fact that the changes experienced by staff were less marked, since staff had generally lower symptoms ratings at the start of the course.

Summary

Whilst there is growing evidence that MBCT is helpful for a range of conditions it is a high demand intervention involving practical and psychological challenges for patients. This evaluation describes how we enabled the intervention to be embedded in a wider psychological therapy service. The mindfulness skills course resulted in benefits for patients and proved to be compatible with a variety of other therapeutic approaches. We believe that these groups can enhance service delivery in secondary care; as one of our referrers stated *it is an invaluable part of the PPS service and it is good to offer 'package' of interventions rather than single one*. This paper was intended to be relevant to mental health practitioners interested in offering MBCT courses in similar clinical settings and we hope that this contributes to the dissemination of MBCT across services.

Final word

Whilst this is unusual in a journal article, we would like to end with the comments of one participant, who wrote the following when approached for permission to use quotes from their feedback form (some identifying information removed):

On completion of the course, I returned to full time work for 9 months, before resigning and launching into freelance ... consultancy. I now work 1 to 2 days a week, earning a bit less but have time to volunteer in my community, fundraise for mental health charities, bake, and LIVE!

Since last December, I have been in a fantastic, supportive and fully intimate relationship ...and to think last time you saw me I could barely shake hands!! I am hoping to reduce medication in the months ahead.

Thank you doesn't come close - your skilful leading of the course and the power of learning within and from the group changed my life in profound ways and helped me to move on from a life barely worth living to a place of contentment and fulfilment.

Acknowledgments

We are grateful to all patient and staff participants and referrers for their participation. We would like to say thank you to Julie Gallagher for the admin support of the courses and help with preparing this paper. Also thank you to Rebekah Sutherland for help with statistical analysis, to Dr Alistair Smith and Sally Rose for their helpful comments on the earlier version of this paper and ongoing support with this implementation project. We also would like to express gratitude to Helen Radelaar, who provided initial strategic support within the service.

Recommended follow up reading

Crane R., & Kuyken W. (2012). The implementation of mindfulness-based cognitive therapy: Learning from the UK health service experience. *Mindfulness*, published on-line 22nd June 2012

Good Practice Guidelines for Mindfulness-based Teacher Trainers (2013). UK Network for Mindfulness-Based Teachers. <http://mindfulnesssteachersuk.org.uk/pdf/GPG4-TrainersfinalOct2013.pdf>

Good Practice Guidelines for Mindfulness-Based Teachers (2011). UK Network for Mindfulness-Based Teachers. <http://mindfulnesssteachersuk.org.uk/pdf/teacher-guidelines.pdf>

Segal Z., Williams J.M.G. & Teasdale J.D. (2013). *Mindfulness-Based Cognitive Therapy for Depression*. 2nd Ed. New York: Guilford Press.

References

- Antony M.M., Cox B.J., Enns M.W., Bieling P.J. & Swinson R.P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment*, 10(2), 176-181.
- Arch J.J. & Ayers C.R. (2013). Which treatment worked better for whom? Moderators of group cognitive behavioural therapy versus adapted mindfulness based stress reduction for anxiety disorders. *Behaviour Research and Therapy*, 51,434-442.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27-45.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Crane C., Crane R.S., Eames C., Fennell M.J.V., Silverton S., Williams J.M.G. & Barnhofer T. (2014). The effects of amount of home meditation practice in Mindfulness Based Cognitive Therapy on hazard of relapse to depression in the Staying Well after Depression Trial, *Behaviour Research and Therapy*, 63, 17-24.
- Crane, R. S., & Kuyken, W. (2013). The implementation of mindfulness-based cognitive therapy: Learning from the UK health service experience. *Mindfulness*, 4(3), 246-254.
- Demarzo, M. M. P., Cebolla, A., & Garcia-Campayo, J. (2015). The implementation of mindfulness in healthcare systems: a theoretical analysis. *General hospital psychiatry*, 37(2), 166-171.
- Evans C., Mellor-Clark J., Margison F., Barkham M., Audin K., Connell J. & McGrath G. (2000). CORE: Clinical Outcomes in Routine Evaluation. *Journal of Mental Health*, 9,247-255.
- Finucane, A., & Mercer, S. W. (2006). An exploratory mixed methods study of the acceptability and effectiveness of mindfulness-based cognitive therapy for patients with active depression and anxiety in primary care. *BMC psychiatry*, 6(1), 14. doi:10.1186/1471-244X-6-14
- Grabovac A.D. & Lau M. (2011). Mechanisms of Mindfulness: A Buddhist Psychological Model. *Mindfulness*, 2, 154-166.
- Green, S. M., & Bieling, P. J. (2012). Expanding the scope of mindfulness-based cognitive therapy: Evidence for effectiveness in a heterogeneous psychiatric sample. *Cognitive and Behavioral Practice*, 19(1), 174-180. doi: 10.1016/j.cbpra.2011.02.006
- Henry, D. & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44(2), 227-239.

Hofmann S. G., Sawyer A. T., Witt A. A. & Oh D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 78*, 169-183.

Khoury B., Lecomte T., Fortin G., Masse M., Therien P., Bouchard V., Chapleau M.A., Paquin K & Hofmann S.G. (2013). Mindfulness-based therapy: a comprehensive meta-analysis. *Clinical Psychology Review, 33*(6), 763-71.

Kurdyak P., Newman A. & Segal Z. (2014). Impact of mindfulness- based cognitive therapy on health care utilisation: a population-based controlled comparison. *Journal of Psychosomatic Research, 77*, 85-89.

Mace C. (2008). *Mindfulness and Mental Health. Therapy, Theory and Science*. Routledge.

Marx R., Strauss C., Williamson C., Karunavira & Taravajra (2014). The eye of the storm: a feasibility study of an adapted Mindfulness-based Cognitive Therapy (MBCT) group intervention to manage NHS staff stress. *The Cognitive Behaviour Therapist, 7*, e18, 1-17.

Mitchell, M., & Heads, G. (2015). Staying Well: A Follow Up of a 5-Week Mindfulness Based Stress Reduction Programme for a Range of Psychological Issues. *Community mental health journal, 51*(8), 897-902.

Moorhead S. (2012). Report of a feasibility study of a Mindfulness group for clients, carers and staff of an early intervention in psychosis service. *The Cognitive Behaviour Therapist, 5*, 93-101.

National Institute for Clinical Excellence (2004). Management of depression in primary and secondary care. Clinical Guideline 23.

National Institute for Clinical Excellence (NICE). (2009). Depression: the treatment and management of depression in adults (update). Clinical Guideline 90.

Radford S.H., Crane R.S., Eames C., Gold E. & Owens G.W. (2012). The feasibility and effectiveness of mindfulness –based cognitive therapy for mixed diagnosis patients in primary care: a pilot study. *Mental Health in Family Medicine, 9*, 191-200.

Ruths, F. A., de Zoysa, N., Frearson, S. J., Hutton, J., Williams, J. M. G., & Walsh, J. (2013). Mindfulness-based cognitive therapy for mental health professionals—a pilot study. *Mindfulness, 4*(4), 289-295.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). Mindfulness-based cognitive therapy for depression: A new approach to relapse prevention. New York: Guilford.

Strauss C., Cavanagh K., Oliver A. & Pettman D (2014). Mindfulness-based interventions for people diagnosed with a current episode of an anxiety or depressive disorder: a meta-analysis of randomised controlled trials. *PLOS ONE, 9*(4): e96110, published on-line 24 April 2014.

Sundquist, J., Lilja, Å., Palmér, K., Memon, A. A., Wang, X., Johansson, L. M., & Sundquist, K. (2015). Mindfulness group therapy in primary care patients with depression, anxiety and stress and adjustment disorders: randomised controlled trial. *The British Journal of Psychiatry*, 206(2), 128-135.

Surawy C., McManus F., Muse K. & Williams J.M.G. (2014). Mindfulness-based cognitive therapy (MBCT) for health anxiety (Hypochondriasis): rationale, implementation and case illustration. *Mindfulness*, published on-line 21 January 2014.

Teasdale J.D., Segal Z.V. & Williams J.M.G. (2003). Mindfulness training and problem formulation. *Clinical Psychology: Science and Practice*, 10, 157-160.