A randomized controlled trial of mindfulness-based cognitive therapy for recurrent depression: a Danish population study

Anne Maj van der Velden[1,2], Andreas Roepstorff[1,4,*], Mia S. O'Toole[3], Lone O. Fjorback[1], Antonia Sumbundu[1,2], Jacob Piet[1], , Willem Kuyken[2*]

[1] Department of Clinical Medicine, Aarhus University, Aarhus, Denmark
[2] Department of Psychiatry, Oxford University, Oxford, United Kingdom
[3] School of Business and Social Sciences, Aarhus University, Aarhus, Denmark
[4] School of Culture and Society, Aarhus University, Aarhus, Denmark
* shared senior authorship

ABSTRACT

Background: Mindfulness-Based Cognitive Therapy (MBCT) is an effective and cost-effective treatment for prevention of relapse risk amongst individuals with recurrent depression. However, the efficacy of MBCT has not been validated in a Danish population.

Method: We recruited a Danish population of participants with recurrent depression (N=80) and a history of least 3 previous episodes. The participants were randomized to an immediate start of MBCT + treatment as usual (TAU) treatment or a TAU waitlist control group receiving MBCT with delayed start (6 months post randomization) in a 5:3 ratio, stratified according to antidepressant use and participants' symptomatic status. We followed participants over 15 months assessing depressive symptoms at 0, 3, 6, 9, 12 and 15 months post randomization and relapse risk at 15 months post randomization.

Results: In the controlled design (0-6 months post randomization), we found that immediate MBCT +TAU significantly reduced depressive symptoms at post treatment (g=0.82, p=0.001) and at 3 months follow up (g=0.51, p=0.002) compared to the TAU waitlist control group. Most of the sample (74%) entered with symptoms in the depressed range. For this group, 65% recovered after MBCT, whereas the control group did not recover and showed a slight worsening tendency (-1%). Amongst the ones who recovered after MBCT, 93% remained in the non-depressed range at 12 months follow up. Those with higher residual symptoms, a history of childhood trauma and those who engaged more with MBCT had greater clinical outcomes, whereas antidepressant usage and number of previous episodes did not moderate clinical outcomes. In the prospective design (0-15 months post randomization), we found that relapse risk or nonrecovery was 30% amongst those with an immediate start of MBCT+TAU compared to 56% amongst those with who received MBCT with a delayed start (6 months post randomization) and significantly different (HR=0.369, p=0.013). This finding was mainly driven by greater relapse and nonrecovery during the six months when the TAU waitlist control group did not receive MBCT. Indeed, when the TAU waitlist group received MBCT 6 months post randomization they also experienced a reduction in depressive symptoms (g=0.66, p=0.030) following treatment.

Conclusion: In a Danish population of participants with recurrent depression, we replicated the efficacy of MBCT in reducing depressive symptoms and relapse risk over time. In Denmark, MBCT is rarely offered as a treatment option for recurrent depression and is currently only recommended as an add-on treatment to antidepressants for recurrent depression by the national health guidelines.

Our study showed that MBCT was effective in reducing depressive symptoms and relapse risk both for participants on maintenance antidepressant medication, and those not on antidepressant medication.

INTRODUCTION

Depression is a leading cause of disability worldwide (Organization, 2020). Furthermore, depression often takes a recurrent course; with the risk of recurrence or developing persistent residual symptoms increasing for every episode (Rottenberg et al., 2018). To make matters worse, prevalence has long been on the rise with the current coronavirus pandemic starting to unleash a wave of new cases internationally and in Denmark (Organization, 2020; Sonderskov et al., 2020). Hence, there is a strong need for effective preventative treatments.

In Denmark, antidepressant treatment is the recommended approach for prevention of recurrent depression. The Danish National Health guidelines (Sundhedstyrelsen, 2019) recommends that to prevent recurrence and manage residual symptoms, people with high risk of relapse (i.e., previous episodes of depression, severe depression, residual symptoms or psychosocial challenges) should continue maintenance antidepressants for at least 2 years. However, many individuals experience unwanted side-effects and some do not adhere to the prescribed medicine (Pigott, 2015). Furthermore, antidepressants are not effective for all, contraindicated for some groups, and only protective for as long as they are taken (Berwian et al., 2020; Geddes et al., 2003). Finally, many individuals express a preference for psychological interventions that provide long-term protection against relapse or recurrence (Kuyken et al., 2015)

Mindfulness-based cognitive therapy (MBCT) is an effective and cost-effective group-based psychological intervention teaching people with recurrent depression skills to reduce depressive symptoms and relapse risk particularly for participants with a history of at least 3 previous episodes. The latest meta-analysis of nine randomized controlled trials (n=1258) found that MBCT reduced depressive relapse or recurrence compared with active treatments (hazard ratio (HR), 0.79; 95% CI, 0.64-0.97) or when given as an alternative to maintenance antidepressants (HR 0.77; 95% CI, 0.60-0.98) (Kuyken et al., 2016). In addition, recent studies suggest that MBCT might also confer benefit to those with acute symptoms (Goldberg et al., 2019; Pots, Meulenbeek, Veehof, Klungers, & Bohlmeijer, 2014; Thimm & Johnsen, 2020; Tickell et al., 2020; van Aalderen et al., 2015), treatment resistant depression (Cladder-Micus, Speckens, et al., 2018; Eisendrath et al., 2016), and those at greatest risk for relapse (e.g. a history of childhood trauma and multiple episodes) (Kuyken et al., 2015; J. M. Williams et al., 2014). MBCT has been been endorsed by the American Psychiatric Association and recommended in clinical guidelines in the United Kingdom, Canada, The Netherlands, Australia and New Zealand (e.g. (National Institute for Health and Care Excellence, October 2009, updated April 2018)) as a prophylactic intervention for recurrent depression in remission. In 2016 the Danish National Health Guidelines included MBCT, but only as a supplementary treatment to antidepressants, for treatment and prevention for relapse for individuals with recurrent depression (Sundhedsstyrelsen, 2016). Despite the growing international evidence-base for MBCT, the efficacy of MBCT has not been validated in a Danish population. Hence, in a randomized controlled trial with a Danish population of individuals with recurrent depression, we tested whether MBCT+TAU was better than TAU in reducing depressive symptoms and relapse risk, and whether the efficacy of MBCT would last over a 12-month period. We also examined whether this efficacy was moderated by antidepressant usage.

METHODS

Study design and participants

We designed a randomized controlled trial examining the effect of MBCT on residual depressive symptoms and days to relapse in a Danish population of individuals with recurrent depression and at least 3 previous episodes.

Participants were recruited from general practices and local psychiatric units in the region of Midtjylland in Denmark. Using a structured diagnostic interview DSM_IV_TR (Gorgens, 2011) we included participants fulfilling the eligibility criteria: a) diagnosis of recurrent major depressive disorder with or without a current episode; b) three or more previous major depressive episodes; c) age 18 years or older and, d) if on antidepressants, a stable dose of SSRI or SNRI medication for a minimum of 8 weeks. Participants were omitted if they: e) had a current severe major depressive episode, a history of schizophrenia, schizoaffective disorder, bipolar disorder, current severe substance abuse, organic mental disorder, current/past psychosis, pervasive developmental delay, persistent antisocial behavior, persistent self-injury requiring clinical management/therapy; f) followed formal concurrent psychotherapy; having previously completed MBCT/MBSR training and/or extensive meditation experience (i.e., retreats or regular meditation practice); g) were on anti-psychotic medication and benzodiazepines. All participants gave a written informed consent. The study protocol was approved by the the regional ethics committee in the Central Denmark Region ID: 1-10-72-259-16: 66534 and registered at the Danish Data Protection Agency (2016-051-000001), and on ClinicalTrials.gov (NCT03353493).

Randomization and blinding

An independent researcher randomly assigned participants to MBCT with immediate start + (TAU) treatment or a TAU waitlist control group receiving MBCT with delayed start (6 months post randomization) in a 5:3 ratio, using a computer-generated sequence stratified according to antidepressant use and participants' symptomatic status using the Beck Depression Inventory II of < 13 being asymptomatic, and greater >13 being symptomatic (A. T. Beck, Steer, Ball, & Ranieri, 1996).

While participants were blinded to treatment allocation at the baseline assessment, participants, therapists, and the trial coordinator were made aware of treatment allocation after baseline assessment, as is normally the case with trials of psychological treatment. Questionnaires were administered online, and diagnostic research assessors conducting clinical interview to access relapse risk, were blinded to the treatment allocation.

Interventions

MBCT was delivered according to the treatment manual (Segal et al., 2013b) from highly experienced MBCT therapists with at least 7 years experience teaching Danish MBCT classes. MBCT combines psychoeducation with a systematic training in mindfulness meditation techniques to teach participants skills to prevent relapse or recurrence of depression. The treatment consisted of a pre-class interview, weekly classes of 2 hours during an 8 weeks period with homework, a whole practice day and 4 booster sessions offered every 3 months after the program.

TAU for recurrent depression in Denmark is typically antidepressant medication, as The Danish National Health guidelines (Sundhedstyrelsen, 2019) recommends that to prevent recurrence and manage residual symptoms, people with high risk of relapse (i.e., previous episodes of depression, severe depression, residual symptoms or psychosocial challenges) should continue maintenance antidepressants for at least 2 years. Although not everyone responds sufficiently to antidepressant medication and some people do not wish to take maintenance medication. In this study, we restricted TAU to a stable dose antidepressant medication or no medication at the time of treatment and no psychotherapeutic intervention. These restrictions were put in place in order for us to draw conclusions of the efficacy on MBCT, by omitting or keeping other treatments stable. All participants were encouraged to adhere to their TAU medication for the full length of the trial. However, patients remained in the trial whatever treatment choices they made, and any change in treatment was recorded.

Procedure

All participants were assessed at T1 baseline (before randomization) and at 3 months (T2), 6 months (T3), 9 months (T4), 12 months (T5), and 15 months (T6) post randomization. The TAU + immediate MBCT received MBCT between baseline and 3 months post randomization, and the TAU + delayed MBCT received MBCT between 6 -9 months post randomization.

Measures

Depressive symptoms: Depressive symptoms was measured using the Quick Inventory of Depressive Symptomology (QIDS_SR (Rush et al., 2003)). Participants were assessed at T1-T6.

Perceived stress: We measured perceived stress using the Perceived Stress Scale (PSS) at T1-T2. (Cohen, Kamarck, & Mermelstein, 1983)

Relapse risk: We measured time to relapse or recurrence of depression 12 months after treatment on basis of clinical assessment conducted by three independent and blinded clinicians (*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition: DSM-IV-TR®*, 2000). Time was assessed retrospectively according to the depression module of the Structured Clinical Interview for DSM–IV TR and relapse or recurrence as an episode meeting DSM-IV criteria for a major depressive episode with 0=Non recovery.

Moderators: We also checked whether antidepressant usage and vulnerability factors such as number of previous episodes of depression and childhood trauma (Bernstein, Ahluvalia, Pogge, & Handelsman, 1997) moderated outcomes.

Clinical efficacy analyses

Depressive symptoms over time were analyzed with in multilevel models (MLMs) with time (level 1) nested within individuals (level 2). When comparing groups in the controlled portion of the design (0-6 months post randomization), interaction effects between time and group were tested. In the longitudinal design (0-15 months post randomization), the effect of time was evaluated within the immediate MBCT group. MLMs were based on the intent-to-treat sample, and p-values were two-sided. The Intercepts were set as random in all models, and the slope was specified as random if it significantly improved the model fit. Missing data at the item level were handled by mean substitution, but only considered for participants with less than 50 % missing data. Effect sizes were expressed as Hedge's g which is a variant of Cohen's d adjusting for small sample bias. A value of 0.2, 0.5, and 0.8 were taken to denote effect sizes of small, medium, and large magnitudes, respectively (Cohen, 1988). Cox regression was used to access relapse risk. All analyses were performed in SPSS-25.

RESULTS

Between February 2017 and February 2018, 107 participants were assessed for eligibility, of which we recruited 80 patients with recurrent depression. Most of the sample (N=58, 74%) entered with symptoms in the depressed range, and 82% was on maintenance antidepressants. Of these, 50 participants were randomly allocated to receive MBCT in addition to treatment as usual (TAU) and 30 participants to TAU with delayed MBCT (6 months post randomization). This ratio of 5:3 was chosen because the trial was designed with both a controlled design (0-6 months post randomization) and a prospective design with the MBCT group having a longer follow up period of 12 months (0-15 months

post randomization). Hence the MBCT group was larger allowing for more attrition for the prospective analysis. Study flow is summarized in Figure 1.

Figure 1: Participant flow

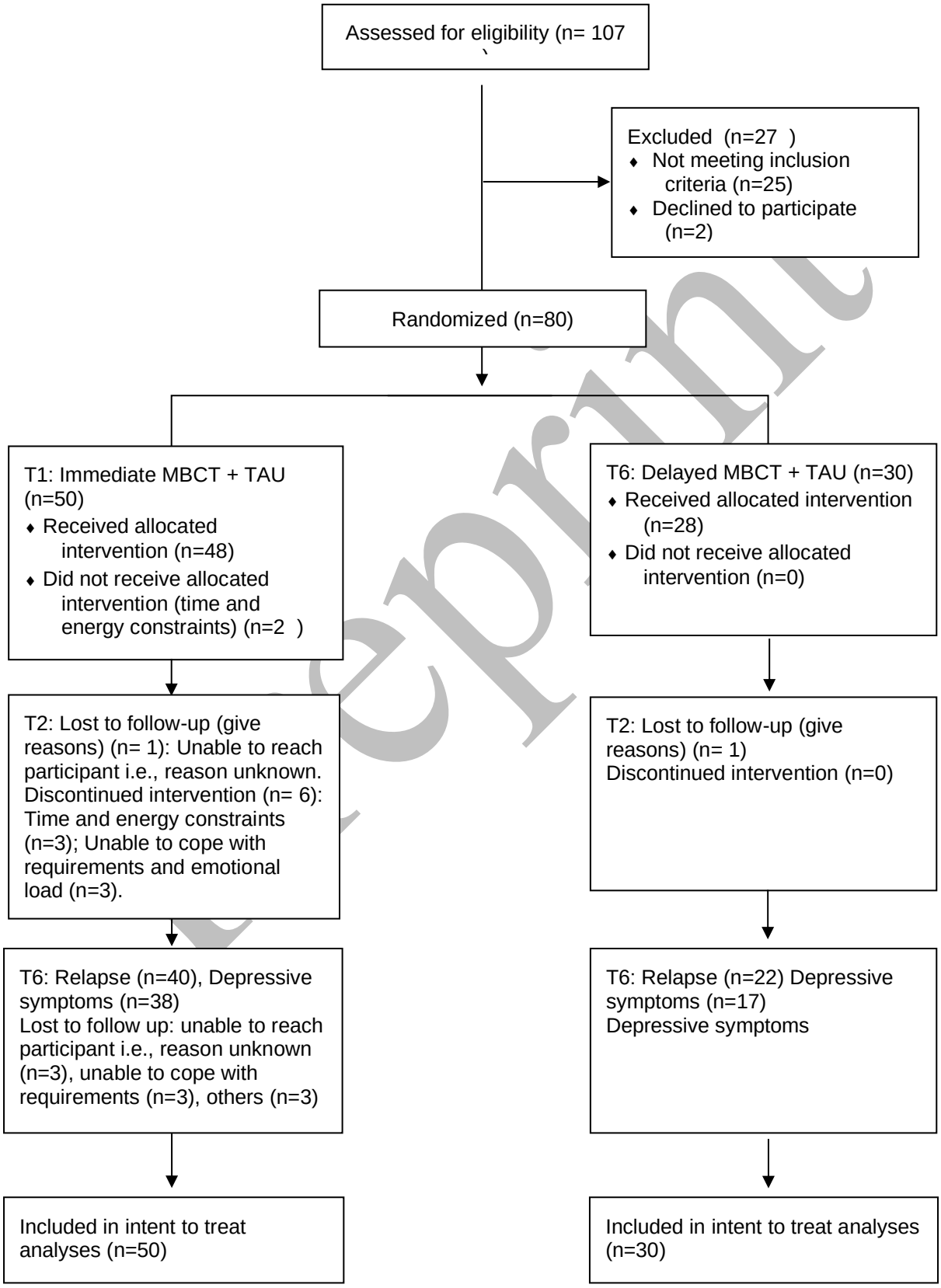


Table 1: Baseline sociodemographic and clinical characteristics

	MBCT+TAU (N=50)	**TAU (N=30)**
Sociodemographic characteristics	N=48	N=28
Age	43.17 (14.22)	45.25 (12.01)
Gender (Female/Male)	35/15 (70%)	23/5 (82%)
Educational level		
Low (<2 years further education)	15 (30%)	3 (11%)
Medium (2-4 years further education)	24 (48%)	21 (75%)
High (>5 years further education)	9 (18%)	4 (14%)
Marital status		
Married/cohabiting	43 (90%)	21 (75%)
Single/not cohabiting	5 (10%)	7 (25%)
Occupational status		
Employed	24 (50%)	14 (50%)
Unemployed/benefits	10 (10%)	4 (14%)
Student	3 (6%)	1 (4%)
Retired	7 (15%)	4 (14%)
Other	9 (19%)	5 (18%)
Clinical Characteristics	N=50	N=28
Symptomatic (QIDS>5)	43 (83%)	25 (76%)
Antidepressant usage	43/7 (86%)	21/7 (75%)
Childhood Trauma	58.79 (6.22) N=42	58.96 (6.33) N=26
Previous episodes of depression	3.90 (1.44) N=41	3.80 (1.36) N=23

Sociodemographic, clinical characteristics and depressive symptoms were balanced between the two groups (Table 1). Of the 8 sessions, the mean attendance was 6.75 sessions with 93.88 % attending at least 4 sessions.

At 12 months follow up, we had 29 % missing data for Depressive symptomology (QIDS) and 20% missing data for relapse due to either drop out or non-respondence. Reasons for drop out are described in Figure 1.

Controlled design

Looking at the controlled design (baseline to 6 months post randomization), immediate MBCT treatment significantly reduced depressive symptoms (B=4.11, CI: -6.47 to -1.78, g= 0.82, p= 0.001) and perceived stress (B=5.97, CI -8.80 to -2.83, g= 0.93, p< 0.001) compared with the control group at post treatment. These interaction effects were of a large size (Figure 2). Attendance to the MBCT program (B=0.48, CI: 0.20 to 0.76, g=.44, p=0.001) and weekly practice (B=0.14, CI: 0.02 to 0.26, g=0.31, p=0.022) moderated depression scores post treatment such that more attendance and practice were associated with better outcome.

Through the 3 months follow-up, MBCT treatment significantly reduced depressive symptoms compared to the control group as indicated by a significant interaction term of a medium size (B=-1.78, CI: -2.92 to -0.63, g=0.51 p=0.002). At baseline 74 % had mild-moderate symptoms. For this group, 65% recovered after MBCT, whereas the control group did not recover and showed a slight worsening tendency (-1%). Those with higher levels of depressive symptoms at baseline benefitted most (B=-2.05, CI: -3.37 to -0.74, g=0.64, p=0.003) along with those with more childhood trauma (B=-0.30, CI: -0.57 to -0.03, g=0.50, p=0.028). In contrast, maintenance antidepressant usage (B=1.53, CI: -2.32 to 5.38, g=0.06, p=.428) and number of previous episodes (B=0.24 , CI: -1.36 to 0.55, g=.07, p=.769) did not moderate results.

Prospective design

Looking only at the group who received MBCT at the start of the study, the effect of time was of a medium to large size (B=-0.67, CI: -0.92 to -0.41, g=0.70, p<0.001) and the reduction in depressive symptoms remained stable over the 12 months follow-up period with no significant change from post-treatment (T2) through follow-up (T6) (B=-0.18, CI: -0.49 to -13, g= 0.20, p=0.247) Amongst the ones who recovered after MBCT, 93% remained in the non-depressed range (QIDS<6) at 12 months follow up (See Figure 3). Those with higher symptoms at baseline had greater benefit of MBCT (B=-1.04, CI: -1.53 to -0.56, g=0.57, p<0.001), again moderated by the engagement with the treatment as measured by attendance during MBCT (B=0.47, CI: 0.19 to 0.75, g=0.43, p=0.001), and practice during MBCT (B=0.16, CI: 0.03 to 0.28, g=0.35, p=0.012) such that more attendance and practice were associated with better outcome.

For the TAU waitlist group that received MBCT 6 month into the study, we found a medium to large effect of MBCT treatment (T3-T4) B=-2.8, CI: -5.37, -0.29, g=0.66, p=0.030, where gains remained stable through the follow-up period with no significant change from post-treatment (T4) through follow-up (T6) (B=-0.52, CI: -1.62, 0.57, g=0.31, p=0.336). (See Figure 4).

Relapse risk

Results of the clinical interviews conducted 15 months post randomization by blinded outcome assessors showed that 30% (12:40) of the immediate MBCT group did not reach thresholds for recovery or relapsed during the study period, compared to 56% (13:22) for the TAU + delayed MBCT control group, who received MBCT later in the study (HR Exp(B)=0.37, CI: 0.17 to 0.81, p=0.013).

This finding was mainly driven by greater relapse/nonrecovery during the six months when the control group did not receive MBCT (see Figure 3).

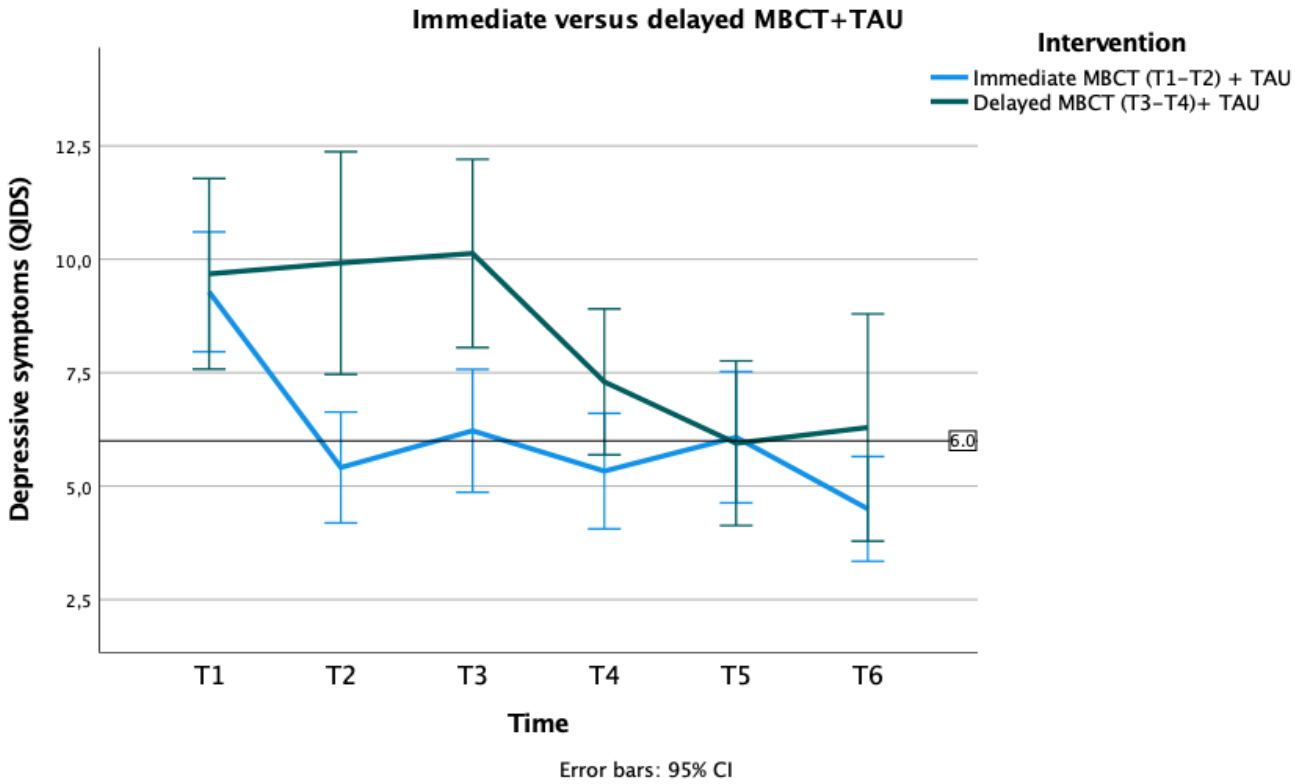
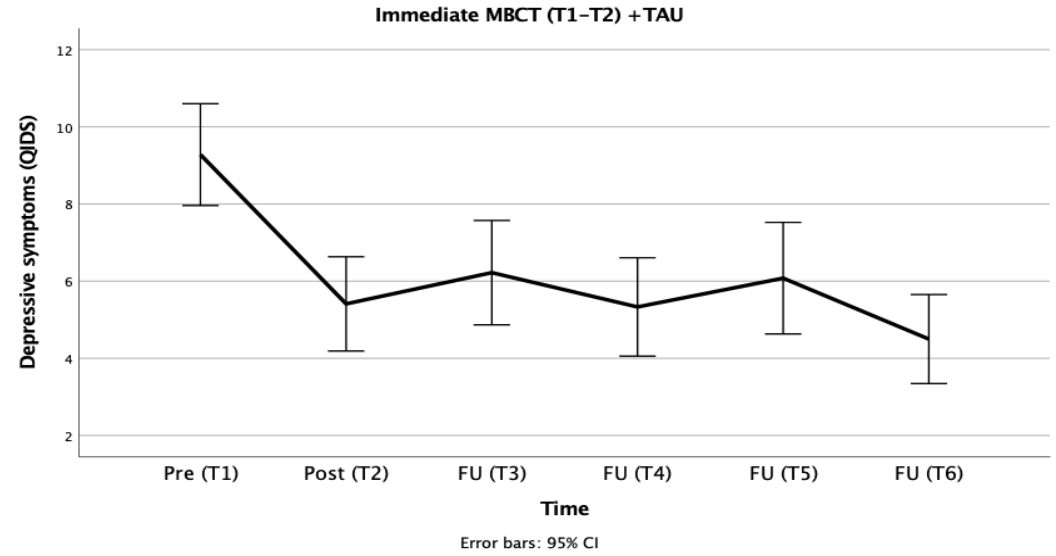


Figure 2: Depressive symptoms over time based on treatment allocation. Immediate MBCT+TAU received MBCT treatment between T1 (just after randomization) and T2 (3 months post randomization). Delayed MBCT+TAU received MBCT between T3 (6 months post randomization) and T4 (9 months post randomization). T5 = 12 months post randomization and T6 = 15 months post randomization. Above QIDS 6 is considered symptomatic, and below QIDS 6 is considered asymptomatic (QIDS 6 is marked with light grey line). Error bars are based on 95% confidence intervals.



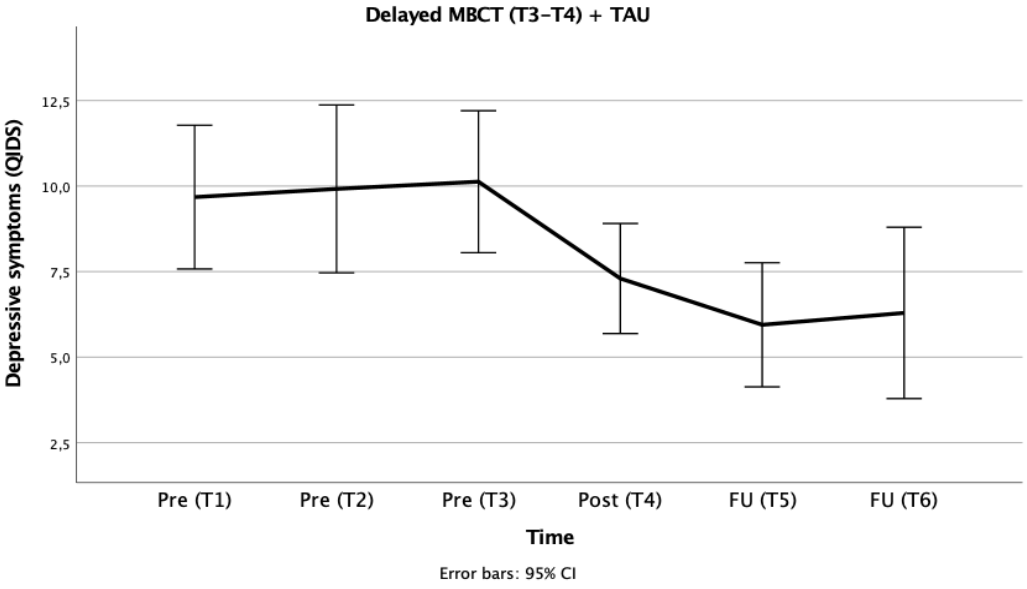


Figure 3 A + B: Depressive symptoms over time. Figure A Figure 3A: Depressive symptoms over time for the group receiving immediate MBCT depressive Figure B depressive symptoms over time for the control group receiving delayed MBCT Delayed MBCT+TAU received MBCT between T3 (6 months post randomization) and T4 (9 months post randomization). T1 = post randomization, T2 = 3 months post randomization, T3 = 6 months post randomization, T4 = 9 months post randomization, T5 = 12 months post randomization and T6 = 15 months post randomization. Above QIDS 6 is considered symptomatic, and below QIDS 6 is considered asymptomatic. QIDS 6 is marked with a light grey line. Error bars are based on 95% confidence intervals.

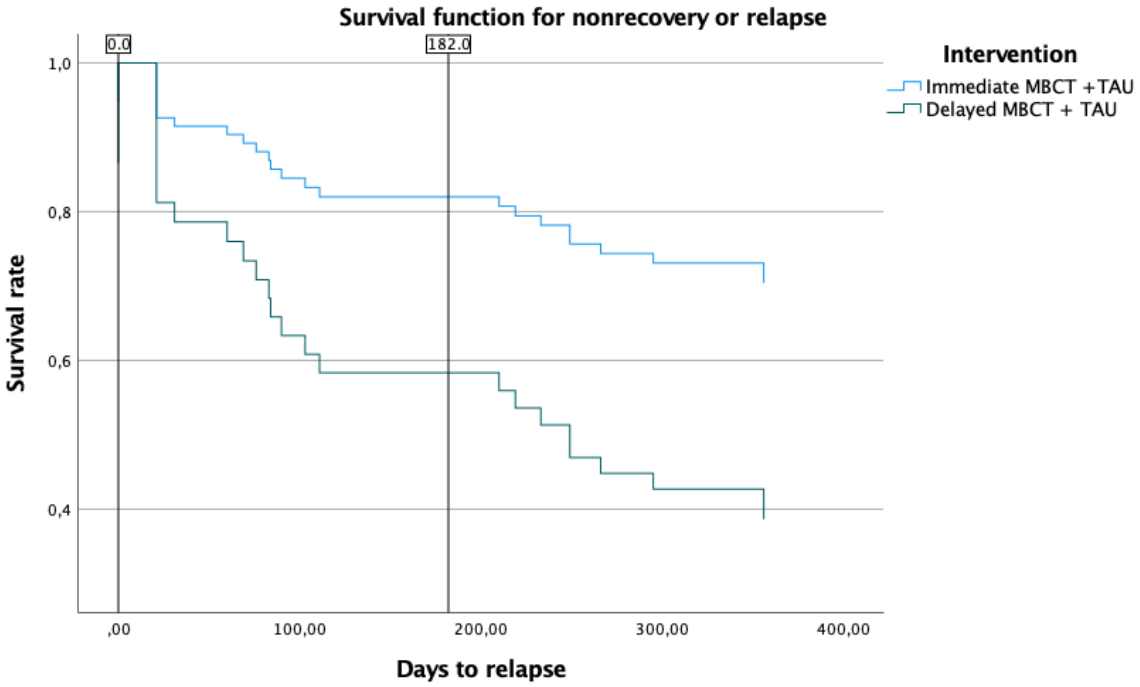


Figure 4 Days to relapse as a function of treatment for the follow up period i.e. 3-15 months post randomization starting right after the first group has had MBCT and for the one year follow up period. MBCT treatment +TAU (light blue) had a lower relapse or non recovery rate compared to the control group who had delayed MBCT+TAU control (dark blue). X-axis shows survival rates (non relapse or recovered status), with higher scores meaning fewer relapse events. Y-axis shows days to relapse with a max of 365 days (one year follow up period).

DISCUSSION

Randomized controlled trials internationally have found that Mindfulness-Based Cognitive Therapy (MBCT) is an effective treatment for reducing of depressive symptoms and prevention of relapse risk amongst individuals with a history of recurrent depression (Kuyken et al., 2016). However, the efficacy of MBCT has not previously been validated in a Danish population, and the Danish Clinical Guidelines do not yet endorse MBCT in the same way as many North American, European and Australasian clinical guidelines. In a Danish population of participants with recurrent depression, we replicated the efficacy of MBCT in reducing depressive symptoms over time. Employing a single-blind, parallel, randomized controlled trial, we found that MBCT in addition to treatment as usual (TAU) was superior to TAU with delayed MBCT (6 months post randomization) both at post treatment and at 3 months follow up. These effects were moderated by attendance to the MBCT program and weekly practice during the program.

Maintenance antidepressant medication is the first-line treatment for treatment and prevention of recurrent depression in Denmark. Here we found that MBCT treatment was highly effective in reducing depressive symptoms in a sample where 82% of the participants were on maintenance antidepressant medication. MBCT led to a large effect in reduction of depressive symptoms, below clinical threshold (QIDS>6), and the effect remained stable throughout the one-year follow-up period. This suggests that MBCT is effective in reducing depressive symptoms, and supplements the current treatment standard of maintenance antidepressant treatment.

In Denmark, MBCT is only recommended as an add-on treatment to antidepressants for recurrent depression (Sundhedsstyrelsen, 2016), however, our study showed that MBCT was effective in reducing depressive symptoms both for participants on maintenance antidepressant medication, and those not on antidepressant medication. Medication status did not moderate results. This is in line, with findings from other international randomized controlled trials, showing that MBCT can also work as a stand alone or an alternative treatment (Huijbers et al., 2016; Kuyken et al., 2015; Kuyken et al., 2016). However, given the small sample size we may have been underpowered for moderation effects of small to medium range.

The relapse risk and non-recovery rate was 30 % (13:40) over one year follow up period for the group who received MBCT at the start of the study, compared to 56% (13:22) for the group who received MBCT six months into in the study. The survival figures showed that the main difference between the group was in the controlled phase of the design (first 6 months), with a higher non-recovery and relapse rate for the delayed MBCT group. While the difference between the groups was statistically significant, the inclusion of both participants with or with current symptomatic status, design of the control group receiving MBCT 6 months into the study, and few participants relapsing, complicates interpretation and hence these findings need to be interpreted with some caution and consideration of the design. A stronger conclusion would warrant a bigger sample and a longer controlled period. However, a number of large international trials have addressed these questions with study periods up to 24 months, showing that MBCT reduces relapse/recurrence rates compared to treatment as usual, and is either equally or more effective when compared to active treatments such as cognitive therapy and maintenance antidepressants (N. Farb et al., 2018; Kuyken et al., 2015; J. M. Williams et al., 2014). The latest meta-analysis of 9 RCTs and 1258 participants found that MBCT reduced relapse risk to 38 % over 60 weeks (Kuyken et al., 2016), which is comparable to our finding of 30% over 52 weeks. Finally, residual depressive symptoms serve as a strong predictor of relapse vulnerability (Judd et al., 1998; Rottenberg et al., 2018), and the fact that depressive symptoms remained below clinical threshold (Rush et al., 2003) after MBCT treatment and was maintained for the follow-up period is very promising.

Most trials have been conducted on participants with a history of recurrent depression (+3 episodes) that are in remission when starting MBCT , and hence MBCT is generally recommended as a preventive treatment during remission in (international) health guidelines. However, recently an increasing number of studies have found that MBCT can also be effective in the acute phase (Cladder-Micus, Speckens, et al., 2018; Goldberg et al., 2019; Pots et al., 2014; Tickell et al., 2020; van Aalderen et al., 2015) and in the treatment of prolonged residual symptoms and treatment resistant depression (Sundhedsstyrelsen, 2016). Furthermore, the latest meta-analysis suggested that MBCT is most beneficial for those with higher residual symptoms (Kuyken et al., 2016). In our study 74 % was symptomatic with mild to moderate symptoms at the start of treatment, and those with higher scores on depressive symptoms experienced higher reduction of depressive symptoms. Hence, this study adds to the preliminary but growing evidence-base showing that MBCT may not only be beneficial in the remitted state, and that individuals with mild-moderate symptoms can still benefit from the techniques taught in MBCT.

MBCT may also have benefits in terms of cost-effectiveness. Given the short group-based format (one therapist can lead a group of 12-15 people), MBCT is likely more cost-effective and scalable than individual psychotherapy. A large trial documented the cost-efficacy of MBCT's 8 week's group format to be on par with maintenance antidepressants (Kuyken et al., 2015), and a recent Canadian meta-analysis suggests that MBCT may even be slightly more cost-effective than maintenance antidepressants (Pahlevan, Ung, & Segal, 2020).

Given the findings of this study on MBCT for recurrent depression with a Danish population and the robust international evidence-base, we conclude that MBCT can be effective for individuals with recurrent depression both as a stand-alone treatment, or as an alternative or add-on treatment to antidepressants. The efficacy and cost-effectiveness of MBCT argues for making MBCT more widely available in Denmark, and enhancing the current Danish guidelines to also include MBCT as a stand-alone treatment or alternative to antidepressant medication, for those who do not respond to or do not wish to take antidepressant medication.

Data sharing statement and trial registration

Deidentified individual participant data that underlie the results reported in this article, is available upon request to researchers with a methodological sound proposal. Proposals should be directed to the corresponding author. Group data, study protocol and analytical code will be made available for download on Github. The study was registered at ClinicalTrials.gov (NCT03353493).

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Contributors

AMV, AR and WK were responsible for the original proposal and AMV secured funding for the trial. AMV developed the design and protocol, and AR, WK, advised on the design. AMV was responsible for the general management of the study and LOF oversaw the clinical management of the study. AMV, AS, JP oversaw the MBCT treatment. AMV and LOF collected the data. AMV, MSO,

AR and WK created the analysis strategy. MSO analyzed the data. AMV, MSO, AR and WK interpreted the data. AMV wrote the initial draft. All authors contributed to, and approved, the final manuscript.

Conflicts of interest

The author(s) declares the following potential conflicts of interest. WK is the director of the Oxford Mindfulness Centre. He receives payments for training workshops and presentations related to MBCT and donates all such payments to the Oxford Mindfulness Foundation, a charitable trust that supports the work of the Oxford Mindfulness Centre. WK was until 2015 an unpaid Director of the Mindfulness Network Community Interest Company and gave evidence to the UK Mindfulness All Party Parliamentary Group. He received royalties for several books on mindfulness published by Guilford Press. LOF is director of the Danish Centre for Mindfulness. She receives payments for presentations, workshops and teacher training related to MBSR and MBCT and donates payments to the Danish Centre for Mindfulness.

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