Journal of Depression & Anxiety

Dammen et al., J Depress Anxiety 2016, 5:2
DOI: 10.4172/2167-1044.1000227

Research Article Open Access

A Two Year Follow up Study of Group Metacognitive Therapy for Depression in Norway

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Abstract

Objective: Preliminary data support the implementation of individual metacognitive therapy (MCT) for depression and recently published data indicate that group MCT in the treatment of depression is effective and well-accepted. This study examined 12 and 24 months follow up of patients treated with group MCT. We conducted a one and two year follow-up of an open trial of group MCT.

Method: 11 patients who were consecutively referred by general practitioners to a specialist psychiatric practice in Norway participated in an open trial of the effects and feasibility associated with group MCT for depression. All of the patients met the DSM-IV criteria for major depressive disorder (MDD) and were followed up for 6 months, one and two year. The primary symptom outcome measure was severity of depression whilst secondary outcome measures included levels of anxiety, rumination, and metacognitive beliefs. We also assessed recovery rates and changes in comorbid Axis I and Axis II diagnoses at one and two year follow up.

Result: Large clinically significant improvements across all measures that were detected at post-treatment were maintained at one year and two year follow up. Based on objectively defined recovery criteria, 70% of the patients were classified as recovered at 1 year and 80% at 2 year follow up.

Conclusion: These preliminary data indicate that group MCT in the treatment of depression had sustained efficacy after one and two years, beyond what has been typically reported for cognitive behavioral therapy (CBT).

Keywords: Depression, Cognitive-behaviour therapy, Metacognitive therapy, Group therapy, Rumination, Relapse, Anxiety, Follow up

Introduction

Major depression is predicted to become the single leading cause of disease burden in 2030 and is associated with premature death [1]. Cognitive-behavioral therapy (CBT) is a highly recommended treatment for depression with proven efficacy [2-4], but only 40–58% of patients recover and only between one-third and one-quarter remain so 18 months after treatment [5-7]. Metacognitive therapy (MCT) is based on the metacognitive model for emotional disorder and may address this limitation by targeting core mechanisms involved in the development and maintenance of depression [8,9]. Given the recurrent and persistent nature of depression, an important test of psychological treatments is the need to demonstrate stability of long-term therapeutic effects which has yet not been established for group MCT for depression.

The metacognitive model of emotional disorders

The metacognitive model of emotional disorder [8,9] is a comprehensive model for understanding the causal and maintenance mechanisms of depression. According to this model, the maintenance of emotional disorders is associated with the activation of a specific style of thinking called the Cognitive Attentional Syndrome (CAS). This consists of worry and rumination which are used as a means of coping. Furthermore, the CAS consists of an attentional strategy of excessively focusing on sources of threat (e.g., thoughts, feelings) and coping behaviours (e.g., avoidance, thought suppression) that are unhelpful. Wells and Matthews [8] proposed that the CAS is a product of two types of metacognitive beliefs: (1) positive beliefs about rumination and threat monitoring (e.g., "I must ruminate in order to find an answer to my sadness"), and (2) negative beliefs about the uncontrollability and significance of thoughts and feelings (e.g., "My depressive thinking is uncontrollable"). The metacognitive model links vulnerability to depression to the ease with which the patient activates the CAS in response to stress or mood disturbances. Numerous studies support the metacognitive model which has been empirically evaluated by Wells [10] and tested specifically for depression [11].

Metacognitive therapy

Metacognitive therapy (MCT) [9-10] is grounded in the metacognitive model. MCT aims to modify the CAS and the metacognitions giving rise to it. MCT for depression aims to: (1) increase awareness of rumination, worry and threat monitoring; (2) facilitate more flexible control of these processes and (3) modify negative and positive metacognitive beliefs. MCT enables the patient to develop a new set of responses to negative thoughts and feelings without activating CAS.

Recent studies provide evidence of efficacy of MCT in both individual and group therapy in MDD [12-20]. In particular, we found that after 10 sessions of group MCT that all patients had recovered with 91% recovered at six months follow up [18]. The study design and

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Received March 15, 2016; **Accepted** April 25, 2016; **Published** April 28, 2016

Citation: Dammen T, Papageorgiou C, Wells A (2016) A Two Year Follow up Study of Group Metacognitive Therapy for Depression in Norway. J Depress Anxiety 5: 227. doi:10.4172/2167-1044.1000227

treatment are described in detail elsewhere [18]. However, we do not know much about the stability of therapeutic gains. Two recent studies have indicated stability effects of MCT in GAD and PTSD, but not in depression [21,22]. One study reported maintenance of treatment effects from 6 months to 30 months follow up on worry assessment in patients with generalized anxiety disorder (GAD) [21]. Given the chronic and recurrent nature of MDD there is a need to investigate the longer term effectiveness of treatment.

The present study aims to investigate the longer term effects in group metacognitive therapy for depression. That is the proportion of patients that remained recovered and improved 12 months and 24 months post treatment.

This study is the first one that aims to examine the long term stability of group MCT effects in the treatment of MDD. In view of the mechanisms of action of MCT and based on the results of recent follow up studies on MCT in GAD (and PTSD) [21,22] we expected that the therapeutic gains would be stable over a period of one to two years.

Methods

Design and participants

This study is a long term follow-up of an earlier published uncontrolled trial [18] conducted in 11 patients referred by general practitioners to a specialist psychiatric practice run by the first author and connected to the Regional Health Authority. For further details regarding design and participants we refer to the previous published trial [18].

All patients were contacted 1 year and 2 years after end of treatment. All patients were screened at follow up consultations using diagnostic interviews and self-assessment questionnaires. The follow-up sample comprised ten females and their age ranged from 21 to 61 years (M = 43.20, SD = 14.73), the lifetime number of episodes of depression ranged from one to three. At baseline eight of the ten patients had one comorbid disorder (Generalized Anxiety Disorder (GAD) = 6; Post-Traumatic Stress Disorder = 1; Somatoform Pain Disorder = 1) and two patients had two comorbid disorders (GAD and specific phobia = 2). Five patients suffered from personality disorders (Avoidant = 2; obsessive-compulsive = 4).

Two patients used antidepressants (Mianserin, Escitalopram) in stable dosages throughout the study.

Outcome measures

Outcome measures comprised the Structured Clinical Interviews for DSM-IV Axis I (SCID-I/P) [23] and for Axis II (SCID-II) [24].

The primary symptom outcome measure was the Beck Depression Inventory (BDI) [25] which consists of 21 items assessing the current level of depression and the scores range from 0 to 63. In addition, the following secondary outcome measures were administered:

Beck Anxiety Inventory (BAI) [26]: The BAI is a 21-item self-report scale assessing the severity of somatic and cognitive symptoms over the previous week. The scores range from 0 to 63.

Ruminative Response Scale (RRS) [27]: The RRS is a 22-item self-report scale that assesses the tendency to ruminate in response to depressed mood and the scores range from 22 to 88.

Positive Beliefs about Rumination Scale (PBRS) [28,29]: This is a 9-item self-report scale that assesses metacognitive beliefs about the perceived value or usefulness of rumination. Scores range from 9-36.

Negative Beliefs about Rumination Scale (NBRS) [29]: The NBRS is a 13-item self-report scale designed to assess negative beliefs concerning the uncontrollability and harmfulness of rumination. Scores range from 13 to 52.

The study was approved by the Regional Committee for Medical and Health Research Ethics.

Treatment

Group MCT was provided by the first author who is a research clinical psychiatrist and an accredited level 1 metacognitive therapist. MCT supervision was provided by the second author.

Group MCT comprised 10 weekly sessions of 90 minutes duration. MCT followed a specific treatment plan [9].

The first phase consisted of developing a metacognitive case conceptualization for each patient in the group followed by socialization strategies. During the second phase the patients were helped to enhance their flexible control over their thinking using attention training, detached mindfulness and rumination postponement experiments. The next phase of treatment involved modifying negative and positive metacognitive beliefs. During this stage MCT also focused on removing unhelpful activities and coping behaviors responsible for perpetuating rumination. Then patients were helped to develop new ways of responding to triggers for rumination. New ways of responding attentionally, behaviorally and cognitively were established. The final phase of group MCT focused on preventing relapse and recurrence of depression. One or two booster sessions were offered during the 6 months follow-up period. One group received one and the other group received two booster sessions each lasting for 60 minutes. For further details of group metacognitive therapy we refer to our previous publication [18].

All treatments were registered during the follow up period. No patients received any formal treatment after the acute treatment phase.

Results

During the follow-up period, 10 out of the initial 11 patients completed all the measures and attended the diagnostic re-screening interviews. The patient who did not attend the follow up was unable to do so for unknown reasons. The means, standard deviations and summary statistics for all the measures administered at the three time points of the follow-up period (6-month, 1-year and 2-year) are shown in Table 1. The scores on each measure at each follow-up time point fell within the normal/non-clinical range [26,27,29,30].

We computed repeated measures ANOVAs on each of the variables across 6-month, 1-year, and 2-year follow-up. If the assumption of sphericity was violated, the Huynh-Feldt correction was applied. There were no significant differences in any scores between the three follow-up points for any of the variables, thus suggesting stability of therapeutic gains. We then examined for clinically significant differences during this period using the Frank et al. criteria [30]. According to these criteria, recovery is defined as the patient no longer meeting diagnostic criteria for MDD and scoring less than or equal to 8 on the BDI. Patients are defined as improved if they no longer meet diagnostic criteria, but have BDI scores greater than 8. The results showed that at 1-year follow-up 7 out of 10 patients could be classified as recovered and the remaining 3 as improved. At the 2-year follow-up point, 8 patients were classified as recovered and 2 as improved.

Finally, we examined the presence or recurrence of Axis I and Axis

Measure	6-month follow-up	1-year follow-up	2-year follow-up	F statistic
BDI	2.80 (3.05)	5.30 (7.21)	4.50 (4.01)	F(2, 18) = 1.02, p = 0.38
BAI	2.50 (3.66)	3.80 (5.39)	5.50 (9.01)	F(2, 18) = 0.85, p = 0.44
RRS	25.0 (5.03)	28.70 (10.34)	28.70 (7.65)	F(2, 18) = 1.59, p = 0.23
PBRS	9.20 (0.63)	9.50 (1.58)	9.50 (1.27)	F(1.11, 10.0) = 0.32, p = 0.61
NBRS	14.70 (2.26)	15.80 (3.19)	15.90 (2.02)	F(2, 18) = 1.45, p = 0.26

Note: BDI = Beck Depression Inventory; BAI = Beck Anxiety Inventory; RRS = Ruminative Response Scale; PBRS = Positive Beliefs about Rumination Scale; NBRS = Negative Beliefs about Rumination Scale.

Table 1: Means, standard deviations (in parentheses), and summary statistics for the primary outcome and secondary measures.

II disorders during the follow-up period. Diagnostic re-assessments at 1-year and 2-year follow-up revealed that, apart from the presence of a pre-treatment somatoform pain disorder, no other Axis I or II disorders were present.

Discussion

This is the first study to examine the long-term maintenance of treatments effects in group MCT for depression. We found that effects were maintained from 6 months to 24 months follow-up. The results of our study are in accordance with those of long-term effectiveness found for MCT treatment in GAD patients [21].

MDD is a chronic and recurrent disorder. A large number of patients with MDD experience multiple relapses and recurrences spending as much as 21% of their lifetime in a depressed condition [31,32]. The maintenance of recovery after effective treatment is one of the current challenges in mental health care [33]. None of the current patients reported recurrence of MDD during the two year follow up, despite the report of challenging negative life events for the majority of patients during the follow up period. It is possible that MCT may reduce vulnerability to recurrence. Studies have reported that time to recurrence is significantly longer in patients who reach remission following the acute phase of treatment [34]. In our study all patients obtained remission and the treatment results thus may protect the patients from early relapse. Studies have reported that about 40% of those who recover during traditional CBT report recurrence of a depressive episode one year after treatment and in a recent study 77% of MDD patients experienced MDD recurrence after 35 months [34,35]. Our results may suggest that group MCT treatment has a prophylactic effect in the sense of forestalling the onset of new episodes. It would be important to know by conducting a larger study with longer follow up and with a comparison treatment if this enduring effect extends to the prevention of recurrence.

If so, what could be the mechanisms of such an effect? It could be a consequence of the resolution of causal processes that contribute to risk of relapse or it may reflect the acquisition of compensatory factors that offset the effects of causal processes [35].

Limitations

Although these findings are positive, it is important to acknowledge that this study is preliminary and used an uncontrolled design with a small sample size. In addition, most of the outcome measures, apart from SCDI-I interviews, were based on self-ratings and the intervention was delivered by one therapist. There may also be methodological limitations with no reliability data available for the diagnostic assessments although they were all confirmed following discussions among two of the researchers. The uncontrolled nature of this study means that we cannot partial the effects of treatment from non-treatment related influences on symptoms.

Despite obvious limitations, this study represents the first study to report that group MCT is associated with long-term treatment effects. As such this study emphasizes the need for future studies with larger sample size and controlled experimental design with long term follow-up and assessments that can provide insight into potential mechanisms for sustained effect. Future studies could also directly compare group versus individual MCT using randomized controlled trial methodologies.

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