Additional Psychiatric Symptoms and Response to Treatment in Recovered Depressed Patients

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ABSTRACT

Objective: The purpose of this study was to evaluate the effect of treatment on reducing the additional psychiatric symptoms in a sample of recovered depressed patients.

Methods: A sample of 354 remitted depressed subjects recruited through community advertisement and clinical practices of psychiatrists and psychotherapists were randomly assigned to mindfulness based cognitive therapy (MBCT), cognitive behavioural therapy (CBT), and treatment as usual groups. The mean age of the patients was 39.1 years, and they had an average of 2.19 episodes of previous depressions. Most patients were either married (50.8%) or single (41.0%). A lot of them were unemployed (60.7%), but nearly a third completed high school (35.6%) and half of them at least some post-secondary education (51.1%). Patients were assessed through the structured clinical interview for DSM-IV disorders (SCID) to be ensured of their fully recovered from their most recent episode of depression. Then, they were randomly assigned to 3 groups and assessed repeatedly through self-report measures, including brief symptoms inventory, and Beck depression inventory.

Results: In this paper, the ancillary benefits of MBCT and CBT were explored. Results showed that in two active groups besides decrease in the rates of clinical depression, significant and lasting decreases in a range of other symptom scores of the brief symptom inventory occurred. These results suggest the benefits of the interventions in prevention programs for depression.

Conclusion: Both active treatments had significantly reduced relapse at 1–year follow up and affected additional symptoms compared to treatment as usual.

1. Introduction

According to the literature, it is not only important to treat the acute episodes of depression, but also to focus on the prevention of relapse (Hollon, Stewart, & Strunk, 2006). The majority of people with clinical depression experience not one, but several episodes of the relapse, with a common estimate of 6 episodes in their lifetime (Judd et al., 2000; Hammen, 2001; Paykel et al., 2005; Patten, 2007). Recently, mindfulness based cognitive therapy (MBCT) (Segal, Teasdale, & Williams, 2002) was developed to address the problem of relapse in depression. MBCT is predicated on the assumption that people with the risk for relapse tend to make negative metacognitive appraisals of their experiences.

Thus, when they recover from a depressive episode, and later experience a negative event, they tend to make such self-statements that actually exacerbate the initial response, and potentially set off a relapse. MBCT teaches patients to experience negative states in a mindful way, to modify the negative metacognition to a neu-

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tral one, and thereby to reduce overreaction to negative events or experiences. Two trials have now documented that MBCT can reduce relapse rates by about 50%, compared to treatment as usual. Surprisingly, given the overwhelming success of more "standard" cognitive behavioral therapy in the treatment of acute episodes of depression, and in reducing relapse rates compared to medication (Hollon et al., 2006), it has not been yet developed as a relapse prevention strategy in its own right.

2. Methods

Data were obtained from a sample of recovered depressed patients who participated in a randomized clinical trial. In this study, 2 different relapse prevention treatments were compared to each other and with the treatment as usual (TAU) (Dobson & Mohammadkhani, 2007a). A total of 354 patients, were assessed through the structured clinical interview for DSM-IV disorders (SCID) to ensure that they had fully recovered from their most recent index episode of depression. Then, they participated in the trial, and comprised the current sample. The SCID-I had been translated into the Persian and all interviews -except 2- were reconfirmed by a second interviewer.

Measures

Brief symptom inventory (BSI)

This tool is available in a standardized Iranian version, including normative data. Intended as a screening tool for detecting clinical symptoms as indicators of emotional distress, the BSI is a self-rated questionnaire with 53 items to be answered on a 5-point Likert-type scale (0–4), ranking from "not at all" to "extremely". Symptoms are assigned to 9 subscales which represent domains of psychopathology: somatization, obsessive–compulsive, interpersonal sensitivity, depression, anxiety, anger–hostility, phobic anxiety, paranoid ideation, and psychoticism.

The current study was a randomized clinical trial, comparing a novel cognitive behavioral therapy (CBT) relapse prevention treatment to MBCT and TAU in a sample of recovered depressed patients. Project therapists chose a treatment of their preference and underwent a training phase, using the available manuals and peer supervision. A total of 351 patients were assessed by SCID to be ensured of their full recovery from the most recent index episode of depression. Then, they were randomly assigned to MCBT (n=134), CBT (n=121), and TAU (n=96) groups. The patients were on average 39.1 years old, and had an average of 2.19 previous episodes of depression. Most patients were married (50.8%) and single (41.0%). A lot of them were unemployed (60.7%), but nearly a third completed high school (35.6%) and half of them passed at least some post-secondary education (51.1%).

The consent form of the study was obtained from Directors of the University of Social Welfare and Rehabilitation Sciences. The objectives of the study were explained to potential participants, and they provided informed consent.

The MBCT and CBT classes were held by experienced therapists with recognized expertise in the delivery of cognitive therapy and MBCT. The classes included 12–15 participants and met weekly for 2 hours during a period of 16 weeks, and this period was followed by a 6 and 12 months follow-up assessment.

Statistical analysis

We used repeated measures ANOVA to analyze the data.

3. Results

We calculated (Condition: MBCT, CBT, TAU waiting list) × (Time: Pretest, Posttest, follow up 6 and 12 month) repeated-measures ANOVA, with BSI scores as the dependent variable (Table 2).

Changes in global severity index as assessed by BSI were analyzed using 4 (time points: pretest, posttest, 6 months follow up and 12 months follow up) _4 (group: MBCT, CBT, TAU versus control group) repeated measures ANOVA. Result with regard to time as within- and groups as between-subjects factor yielded a significant main effect of time $F(3, 311)=21.29$, $P=0.000$, and partial $\chi^2=0.17$ that was qualified by a significant time by treatment interaction as, $F(3, 311)=10.27$, $P=0.000$, and partial $\chi^2=0.09$.

In summary, our results indicated that there were main effects of time; group and time; as well as group in all scores of BSI and F-test changes in BSI scores from the beginning of program to immediately post-program and from immediate post-program to 6 months follow up (Table 2). The follow-up Bonferroni-corrected post-hoc comparisons showed that both active treatments (MBCT & CBT) reduced the levels of 8 indices of BSI compared to TAU, after treatment, and at 6 months follow-up assessments but there was no significant differences at 12 months follow-up assessments.

Table 1. Means and Standard Deviations.

Groups	Pretest	Posttest	6 Months	12 Months
CBT	10.62 (5.171)	7.45 (5.38)	5.06 (0.29)	5.55 (4.91)
MBCT	9.78 (5.41)	7.42 (5.63)	7.35 (6.60)	6.95 (5.86)
Treatment as usual	10.02 (4.57)	9.52 (4.60)	8.35 (4.24)	10.31 (5.25)
Total	10.15 (5.11)	7.99 (5.35)	6.80 (5.27)	7.34 (5.68)

Moreover, there was a insignificant trend for CBT group to have lower levels of psychological disturbance at the 6 months follow-up assessment compared to MBCT group, which was maintained through the 12 months assessment phase.

These results suggest that both CBT and MBCT may provide preventive benefits for patients with prior depression, despite their very different methods and putative mechanisms of action. The implications of these results for the prevention of depression will be discussed.

4. Discussion

The goals of this research were first, to examine the effectiveness of CBT and MBCT on sign and symptoms of depression relapse and compare these effects with TAU, and second to compare CBT and MBCT regarding their effectiveness on depression relapse.

As data showed, both CBT and MBCT were more effective than TAU in treatment and prevention of depression relapse, but there was not any difference in effectiveness of these two treatments.

The priority of psychological treatments such as CBT and MBCT to medication (TAU) lies in approving depression and preventing its relapse, which is a recurrent finding in the literature (Blatt et al., 2000; Evans et al., 1992; Fava et al., 1998; Ma & Teasdale, 2004; Teasdale, Segal, & Williams, 2003; Shea et al., 1992; Kenny & Williams, 2007; Piet & Hougaard, 2011).

We expected that MBCT was more effective than CBT in the follow up phase, as MBCT was designed specifically to prevent relapse in depression. However, there was no difference in the effects of these two treatments. In fact, treatments such as MBCT have developed because therapies such as CBT were not strong enough to prevent relapse in depression. This indifference could be justified by several reasons. First, the CBT model used in this research was accommodated to a relapse-prevention model. Second, although CBT and MBCT have developed basically for different aims -CBT for treatment and MBCT for relapse preventing- there are basic similari-

Table 2. Repeated measures ANOVA from pretest, posttest, 6 months and 12 months follow up.

Scale	F		
	Group	Time	Group × Time
Somatization	9.27	17.7	4.96
Obsessive-compulsive	7.36	38.39	9.96
Interpersonal sensitivity	5.81	18.88	6.05
Depression	13.89	45.15	10.66
Anxiety	8.58	27.25	4.91
Anger hostility	7.38	16.22	6.46
Phobic anxiety	12.11	10.66	4.43
Paranoia	10.24	24.51	4.48
Psychoticism	9.82	23.98	7.42
Global severity index	11.79	21.29	10.29

ties between them, including strong and similar cognitive roots. In addition, both of them focus on negative thoughts and avoidance, which are central problems in depression (Emery, 2000), and help patients cope with these pathological thoughts and factors. The effectiveness of CBT on preventing relapse in depression shown in this research, implicates that CBT has the required potential to apply in relapse prevention if its structure changes to suit this aim. CBT has been a more successful therapy than other therapeutic approaches in recent decades and has been developed and accommodated for new therapeutic purposes.

The effect of CBT on preventing relapse has been observed by Dobson and Mohammadkhani (2007b). Also the effect of MBCT on preventing relapse has been observed by Ma and Teasdale (2004); Teasdale, Segal, and Williams (2003); Mathew, Whitford, Kenny, and Denson (2010); Segal et al. (2010); Ma and Teasdale (2004); Kuyken et al. (2010); Godfrin and Van Heeringen (2010); and finally Piet and Hougaard (2011), but there was not any prior research that compared CBT and MBCT with each other. Therefore, we have no reference study to compare our results with it. One of the reasons for this shortage can be related to this arguable assumption that these two treatments are substantially designed for different purposes. However the results of this research can be a challenge to this assumption.

Although only one of subscales of applied instrument (BSI) in this research directly assessed depression, its use in to studying depression can have several advantages. BSI is a psychopathology-assessing questionnaire that assesses several axis I and II mental disorders. Literature has documented that depression may have comorbidity with many disorders, including OCD and panic disorder; both are assessed by this questionnaire. In addition, depression can represent itself with psychosomatic symptoms, interpersonal sensitivity, or anger-hostility, which all are covered with BSI.

Further studies comparing effectiveness of CBT and MBCT on improving signs and symptoms of depression as well as its relapse prevention in a longitudinal design with larger samples will enhance our knowledge of similarities and differences of those two types of treatment.

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