EMOTION REGULATION IN MAJOR DEPRESSIVE DISORDER

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ABSTRACT

Background: The aim of this study was to determine the efficacy of emotional regulation on the severity of depression as the world’s most debilitating disease in these decades. Methods: This randomized clinical trial conducted 24 out-patient subjects with diagnose of major depressive disorder. They were randomly assigned to two groups receiving serteralin (50-150 mg) daily and emotional regulation therapy or serteralin alone for 12 weeks. In first and last sessions symptoms were assessed by Beck Depression Scale and Emotion Regulation Questionnaire in both groups. Results: the emotional regulation group showed significant difference in depression (p<0.02) and in terms of emotion regulation strategies (p<0.0001) compared to other group. Both groups showed significant differences between pre-test and post-test (p<0.0001). Conclusion: Emotion regulation therapy plus medication in the treatment of major depressive disorder is more effective than medication alone. This is more effective in improving emotional and cognitive symptoms than physical symptoms. This method improves emotional regulation skills in patients who were undergoing psychotherapy.

KEYWORDS: major depressive disorder, emotion regulation, cognitive symptoms.

INTRODUCTION

Depression is one of the most common mental disorders and public issue of human life has been dubbed as the cold of psychiatry. Depressed people see their future probably more
negative than non-depressed people and their chances of less pleasant experiences. That’s why depressed people instead of trying to achieve valuable success in the future spent their energies avoiding existing unpleasant situations.\(^1\) Depressed people feel sad because they consider their problems as sustainable, general and internal.\(^2\) They are drowning in their problems and they will generalize everything. Non-depressed people can take away from their problems. They can interact between negative and positive events of their lives. Depressed people consider themselves as they are the reason of their problems. Non depressed people take the responsibility of things that they can change.\(^3\) At any given point of time, 20-15% of adults suffer significant levels of depression indications and guessed which has about 75% of patients in psychiatric hospitals to cases of depression.\(^4\) In the case of major depressive disorder, general studies carried out in different countries that show a prevalence of it in women is twice more than men. Such variation may be due to different stresses, childbirth, hormonal effects of learned helplessness.\(^5\)

The efforts to raise awareness of CBT interventions in the world will be more, a growing number of people with depression seek treatment are effective therapies, and thus differentiation is important. One criticism of the CBT focuses more on thinking and ignoring excitement. Today, in contrast to the original theory, the usefulness of emotional behaviors and the general view is that emotion before the actual behavior, and optimize the individual’s adaptation to the requirements of their social and physical environment.\(^6\) Emotion by coordinating mental, biological and motivational processes causes individual’s Condition be stabilized with the environment and equip him with special convenient and efficient answers with the issues and finally causes his physical and social survival.\(^7\) Although emotions (such as fear, anger and hatred) has a biological basis, but people are able to influence the intensity, duration and type of their emotional experiences. Emotional regulation includes a range of internal and external processes that is used in order to review, evaluate and modify emotional reactions.\(^8\) Also, the emotion regulation includes a wide range of, cognitive, behavioral, emotional and physiological responses and is necessary to understand the emotional and behavioral correlates stress and negative emotional state.\(^9\) In addition, the results show that effective regulation of emotions has favorable consequences on mental health, psychological well-being, physical health and interpersonal relationships.\(^10\) In general there are multiple strategies to adjust the emotion experiences and processes. One of the most common strategies is emotion regulation using cognitive processes (or cognitive emotion regulation). Cognitive emotion regulation is the cognitive management of emotion provocative
In recent years a wide range of emotion regulation strategies and psychological disorders, such as depression, mania and general anxiety disorders have been investigated. Therefore this study was to evaluate the effectiveness of therapy based on emotion regulation deals with major depressive disorder.

**Methods**

This randomized clinical trial was conducted 24 patients who were referred from Akhavan outpatient clinic and private clinics. They were detected during structured interviews based on DSM-IV-TR criteria for major depressive disorder. They received treatment with sertraline (50-150) mg daily in over the course of psychotherapy. A total of 12 patients diagnosed with major depressive disorder who received only drug therapy with sertraline (50-150) mg per day were considered as the control group.

During treatment, one male patient because of addiction and two females due to the need for hospitalization were excluded and replaced by three other patients.

Clinical version of the Structured Clinical Interview for Axis I disorders in DSM-IV (SCID-I), a standard tool for assessing psychiatric disorders original is based on DSM-IV definitions and criteria which is set for the Research and clinical goals. Validity and reliability of these instruments have been reported in various acceptable studies. For example, the diagnostic reliability between raters was reported kappa higher than 0.7. Persian version of the SCID-I / CV was set and good reliability and validity were reported. Bakhtiari In the study (2000) the validity of this tool by clinical experts and professors was confirmed and psychology and test-retest reliability was reported with week interval 0.95. Beck Depression Inventory (BDI) is a questionnaire that it is designed to measure depression and contains 21 items. Each item reflects one of the symptoms of depression that people experience who are clinically depressed. Dobson and Mohammad Khani (1386) obtained alpha coefficient for outpatient 0.92 and 0.93 for students and test-retest coefficient 0.93 within a week. To investigate the emotional regulation variables, the Emotion Regulation Questionnaire (Emotion Regulation Questionnaire) was used. This questionnaire consists of two sub-scale re-evaluation (reappraisal) (6 items) and emotional suppression (suppression) (4 items). Persian version of Gross and John's Emotion Regulation Questionnaire in the Iranian culture has been normalized by Ghasempour, Ilbeigi and Hassan Zadeh (2011). Statistical analysis and paired t-test was used to analyze the data. All analyzes were performed using SPSS software.
RESULTS AND DISCUSSION

From the 24 participants in the study 50% were male and 50% female. The two groups were similar in terms of gender. The mean age of patients in the intervention group was 36.17 and 36.42 in the control group. In order to verify matched the two groups (psychotherapy + antidepressant) and (antidepressant) the Independent sample T-test was used and there was no significant differences between the two groups. This means that the groups were matched in the Beck's questionnaire initial score.

Table 2-4: Comparing the mean depression score of patients in the study group in times of examining

<table>
<thead>
<tr>
<th>Group of Psychotherapy + medication</th>
<th>Group of Medication</th>
<th>P-value</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Before intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>5/027</td>
<td>40/08</td>
<td>3/728</td>
</tr>
<tr>
<td>After intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19/58</td>
<td>6/626</td>
<td>25/17</td>
<td>6/279</td>
</tr>
<tr>
<td>Difference</td>
<td>21/41</td>
<td>4/33</td>
<td>14/91</td>
</tr>
</tbody>
</table>

Beck Depression Inventory score was statistically significant further change in the group who were undergoing psychotherapy (Table 1). In the group that were treated by psychotherapy the between the first and 12th sessions mean difference was significant (4/33 ± 21/41) P value (0/0001). Also the group were treated by psychotherapy and medical treatment showed significant mean difference between the beginning and end of period (4/9 ± 14/91) P value (0/0001). There were more differences between Beck score tests at the beginning and end of treatment in patients with psychotherapy and medication compared to that have used the drug alone. In the group who had received psychotherapy in each of the subsets (physical, cognitive, emotional symptoms) with differences were significant(P <0/0001)

In the subset physical symptoms in the group that was treated by psychotherapy the mean was (5 ± 1/26); and in group which did not received psychotherapy was the mean was estimated (4/75 ± 1/86) that no significant differences was between the two groups Pvalue <0/7)) (Effect size=0/24). In the subset emotional symptoms in the group that was treated by Mental average (6/92 ± 1/88) and in group psychotherapy was not by average (5/5 ± 1/97) was estimated to be significantly different between the two groups (Pvalue <0/086) (Effect size = 0/05) In the subset of cognitive psychotherapy in a group that was by average (10/33 ±
and in group psychotherapy was not by average (4/67 ± 3/05) was estimated to be significant differences. Between the two groups (Pvalue <0/011) (Effect size = 0/27).

In both treatment groups, whether in the reappraisal and in the suppression level, significant differences between mean scores were observed at the beginning and end of treatment (Pvalue <0/0001). Mean difference of changes in test scores at the beginning and end of treatment in Reappraise category for those who had received psychotherapy (20 ± 4/67) was calculated; And the mean of changes difference in test scores at the beginning and end of treatment in the open category assessment for a group who had received psychotherapy (8/5 ± 4/87) was calculated.

There was a significant differences between mean difference in changes (Reappraisal) in the two groups (Pvalue <0/0001) (Effect size = 0/07). there was a statistically significant difference in mean changes (Suppress) in the two groups P <0/001)) (Effect size = 0/36).

**DISCUSSION**

The study showed emotion regulation is effective in the treatment of major depressive disorder. Reduced severity of symptoms in patients had received psychotherapy and medication at the same time was significantly more than group that had received drug alone. Reducing depression symptoms in all three areas of cognitive, emotional and physical symptoms were evident that this reduction in the subset of cognitive and emotional was more than physical which indicates better impact of the psychotherapy by emotion regulation in the field of cognition and emotion. It should be noted that cognitive and emotional symptoms cause dysfunction in many educational, social and family opportunities for the person. Emotional regulation based psychotherapy with greater functional recovery was achieved within a specified time. Scores difference of Emotional regulation Questionnaire indicated more progress in the group that had received psychotherapy. They showed more progress in the field of re-evaluation of cognitive skills (Reappraisal) than skills which suppress reduction (suppression). Nevertheless score (Effect size) higher in terms of suppressing the effect of further reducing depressive symptoms in patients with suppressed excitement is in decline. Studies have shown that cognitive re-evaluation have more adjusting results than the suppression of feelings And using the suppression of emotions associated with negative outcomes and cause increasing multiple answers in people who trying to suppress these feelings. Some studies suggest that a strong relationship of using the cognitive emotion regulation strategies and emotional problems[9]. Generally results show that people with poor
cognitive methods such as rumination, catastrophe, self-blaming and suppress their excitement, than other people are more vulnerable to emotional problems. While in the people who use desired methods such as re-evaluation (Reappraisal) and reduces their emotional suppression (suppression) and expresses it properly, the vulnerability is lower. Perhaps one of the reasons why some people are prone to psychological disorders, particularly affective disorders and anxiety is undesirable emotion regulation strategies. In support of this idea, some studies show that the ability to regulate emotion successfully associate with many health consequences of physical, social and psychological\cite{15}. On the contrary, it is assumed that failure in regulating emotions is the mechanism underlying mood and anxiety disorders\cite{16}. With regard to the duration of the study that was 3 months and remaining some depressive symptoms at the end of this period so need to continue medication and supplementation therapy must be considered.

CONCLUSION
Our study shows the more significant effect of psychotherapy based on emotion regulation with antidepressant medication on emotional management skills by make better use of reappraisal in dealing with emotions and use emotional expression against its suppression that this leads to a further reduction in depressive symptoms in three cognitive, emotional and physical subsets compared with patients who used anti-depressant medication alone. The reduction in the cognitive and emotional domain was more than physical symptoms.

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REFERENCES