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Abstract

This study is aimed to consider the effectiveness of exposure therapy and Exposure Response Prevention (ERP) on decrease of symptoms of obsessive-compulsive disorder. The research method was quasi-experimental and its design was pre-test and post-test with control group. The statistical population of this study was all patients with obsessive-compulsive disorder (both male and female) referring to therapy centers of Maragheh city that a sample of 30 subjects was chosen by available sampling method and then they were replaced in experimental (therapy) group and control group randomly and answered to Maudsley Obsessive-Compulsive Inventory (MOCI). The findings indicated that the experimental group's average score in obsessive-compulsive symptoms was 14/46 in pre-test and 7/67 in post-test. As well as, in control group, the mean score of obsessive-compulsive symptoms in pre-test was 14/66 and 11/93 in post-test. Thus, it could be concluded that the reduction of scores in post-test of experimental group was accompanied with the decrease of symptoms of obsessive-compulsive disorder in experimental group.

Keywords: Obsessive – Compulsive; Treatment ERP; Maudsley Obsessive Compulsive Inventory.

Introduction

Obsessive-compulsive disorder is characterized by elevated anxiety caused by uncontrollable and intrusive thoughts called obsessions, and repetitive, ritualistic behaviors called compulsions. Children and adolescents with obsessive-compulsive disorder (OCD) cannot stop their worrying and anxiety. Obsession themes may include contamination, harming oneself or others, aggression, sexual misconduct, religiosity, forbidden thoughts, symmetry urges, and the need to tell, ask, or confess. Compulsions take the form of overt behavioral acts, rituals or covert mental acts (e.g. silently counting) [15]. The adult with OCD often recognizes that their behavior is abnormal and problematic. However, due to undeveloped cognitive abilities, children with OCD may not understand that their behaviors are unreasonable. Individuals with OCD experience distress when their compulsions cannot be completed. In children, this distress may manifest as tantrums or angry outbursts. Furthermore, children may not be able to specify the consequence of not engaging in their compulsions and may report a vague sense that “something bad might happen” if they are not able to complete the compulsion [16].

With an estimated lifetime prevalence of 2.5% in adults and 1 to 2% in children and adolescents, OCD is a fairly common psychiatric disorder. Onset is most frequently between six and 15 years of age in males and between 20 and 29 years of age for females [17]. The impairment caused by OCD is significant. Because compulsions serve as the primary coping mechanism, children and adolescents with OCD experience increasing levels of distress and will respond by increasing the intensity and/or magnitude of their compulsions. Thus, these youth may spend more and more time engaging in their rituals. The child’s dependence on their ineffective coping mechanism, in turn, interferes with school, work and social functioning. Accordingly, children with OCD may be reluctant to attend school for fear of embarrassment, and they often withdraw from social activities. Children and adolescents with OCD also possess a higher risk for comorbid anxiety disorders (e.g., social anxiety and panic disorder) and depression. While symptoms may fluctuate, the overall trend in symptom severity increases over the lifetime [26].

So far, various theories as theories of behavioral, cognitive and biological have been trying to explain and provide treatment paradigms to these problems. Biological research in explaining the cause of the disease using positron emission tomography increased glucose metabolism in the cerebral cortex of the socket (orbital frontal cortex) and the core tails have been reported [19]. Another model for explaining and treating obsessive-compulsive...
disorder, a behavioral pattern. According to this model, obses-
sive thoughts are conditioned stimuli. If the answer is relatively
neutral stimuli through the process of learning and pairing with
harmful and anxiety-provoking events that are naturally finds
continuity with fear and anxiety. In this way, ideas and objects
previously neutral stimulus becomes conditional, are able to pro-
voke anxiety and discomfort. Compulsion is there but in a dif-
ferent way. The person finds that particular operation reduces
anxiety is an obsession. Relieve and calm the anxiety that drives
hidden acts as a result of Compulsion, the operation is enhanced.
This will gradually reduce the usefulness of a painful secondary
drives (anxiety) as a learned behavior pattern is fixed [24]. Behav-
ioral therapists, several techniques such as systematic desensitiza-
tion, paradoxical intention, satiation, aversion therapy, thought
stopping, and imaginary concept in the treatment of obsessive-
compulsive disorder have used. Several experiments have been
able to be effective exposure and response prevention Obsessive
prove their territory. The results so far show improvement in 65-
75% of patients using this way [20]. Recently cognitive techniques
in the treatment of OCD considered that evidence of cognitive
components involved in the disorder. Cognitive Theory of obser-
sive - compulsive suggests that the interpretation of catastrophic
thoughts on the importance of the cause and the continuity of
the opinion [21]. The most comprehensive cognitive analysis for
OCD [23] suggests that intrusive obsessive thoughts, stimulating
the launch of certain types of thoughts are automatic. Based on
this theory, an intervention that led to chaos if people will have
a personal belief system, that annoying assessment and thus un-
acceptable negative automatic thoughts to launch (for example,
only bad guys, sexual thoughts banned have). Their sense of re-
ponsibility and shame, the main subject of obsessive thought is.
Compensation in the form of cognitive or behavioral procedure,
an attempt to reduce the sense of responsibility and avoid that
feel ashamed. Accordingly, the identification and correction of
negative evaluation thoughts, correct and prevent extremist at-
titudes of responsible disposal of this feeling, increase exposure
and avoidance behaviors to be centered [14].

This approach is especially effective in patients who complete en-
try exposure and response prevention therapy are afraid or resist-
ant to treatment, because rather than encourage people to stop
compulsive behaviors, abuse targeted phrases acknowledge that the
person forced to perform rituals and to stop these behaviors emphasize safety. Newer studies are generally of exposure and response prevention and cognitive approach to integration and the impact of cognitive-behavioral therapy in the treatment of the symptoms of this disorder are considered. The results of these studies [11, 12, 13, 25] show that this would expedite the immediate consequences of treatment, a significant reduction of symptoms and reduce the risk of recurrence.

Treatment generally obsessed with individual runs and using a
team approach in the treatment of obsessive not common. Un-
til a decade ago, a group approach only as a supplement to the
treatment of individuals with OCD was raised, not as a substitute
for individual treatment [27]. Using this method as an alternative
method for the treatment of obsessive-compulsive disorder is a
completely new approach which is considered a decade ago. In
this way our patients not only a passive receiver of this approach
is useful in creating pressure to break the resistance of patients
to treatment.

[10] analyzed the results of a controlled study was eighteen, have
reached the conclusion that after the implementation of exposure
and response prevention of pathological symptoms disappeared
in 51% of patients, and significant improvements have been the
relative improvement was observed in 31% of cases and only in
10% of patients, this method is not effective. Many studies of
the effects of cognitive behavior therapy in the treatment of ob-
cessive-compulsive disorder have supported. The carefully con-
trolled tests of cognitive behavior therapy in adults and children
have reported success of 85% treatment [8, 9].

This description is natural to assess the efficacy of exposure ther-
apy and response prevention is very important in reducing OCD
symptoms and may increase our knowledge about this disease
and to prevent planning for primary, secondary and treatment, is
smooth. We hope that these new findings and additional re-
search could take a small step in the diagnosis and treatment of
obsessive-compulsive disorder.

Therefore, the present study aimed at investigating the effects of
Exposure and response prevention therapy can reduce symptoms
of obsessive – compulsive.

**Method**

This study is a quasi-experimental one (pretrial, post trail, and
control group). The participants in this study were selected avail-
able and were administered maudsley obsessive compulsive in-
ventory afterwards, the clinical interview was performed based
on DSM-IV-TR diagnostic criteria. They were randomly assigned
into two groups, control and norm group, before considering the
dependent variable. The norm group was taught of eight sessions
(two sessions a week and a half hours).

**Participants and Data Selection**

The participants in this study were 30 Patients with Obsessive-
Compulsive Disorder (both female and male) who in the second
half the 2014 referred to health centers Maragheh.

**Instruments**

The Maudsley Obsessive-Compulsive Inventory (MOCI) is one
of the most used tests in clinical psychology for assessing the
obsessive and compulsive symptoms in psychiatric patients and
as a screening tool in nonclinical population. One of the psycho-
logical tests most commonly used for assessing the obsessive
and compulsive symptoms is the Maudsley Obsessive-Compulsive
Inventory (MOCI) developed by Hodgson and Rachman (1977).
The MOCI is a self-report questionnaire with true-false format
developed for evaluating the type of obsessive-compulsive symp-
toms and discriminating obsessive patients from other neurotic
patients and from nonclinical people. The test is composed of 30
dichotomous items, so that the total score for a subject will range
between 0 (absence of symptoms) and 30 (maximum presence of
symptoms). The original version has four subscales: Checking (9
items), Cleaning (11 items), Slowness (?) items, and Doubting (7
items). Note that the sum of the items for the four subscales is
34, not 30, because four items are included in two subscales [7].
The MOCI can be applied to adults as well as children and adoles-
cents. In addition, it has been applied for assessing obsessive
and compulsive symptoms not only in patients with OCD, but also
for other patient populations (e.g., depressive patients), and as a
screening tool for nonclinical populations [6]. The MOCI is also

a very sensitive instrument to therapeutic change and, as a consequence, it has been applied very frequently in empirical studies evaluating the effectiveness of psychological and/or pharmacological treatments for patients with OCD [5].

**Treatment**

Experimental group For two months received exposure and response prevention. Eight treatment sessions, one hour weekly sessions were presented. The content of therapy sessions include communication, knowledge of treatment goals, principles and rules of sessions, explaining the nature and causes of the disorder and its treatment, explain behavioral therapy with emphasis on exposure and response prevention and logic treatment of the symptoms of subjects, providing practical exposure and how to prevent the responses over several sessions. Five sessions 8 sessions to provide practical treatment devoted.

**Steps exposure and response prevention therapy sessions**

First session: Presentation of the logic of cognitive behavior therapy with exposure and response prevention, identification and treatment sessions fixed rules and in particular rules of each week.

Sessions II and III: Provides a list of triggers symptoms of obsessive thoughts (internal and external), and avoidance behaviors are religious and regulations practices and challenging these situations and behaviors.

Fourth, Fifth and Sixth sessions of practice and preparation to meet the visual, offering homework, reviewing assignments at the beginning of each session and the contract to cooperation clients.

Seventh and Eighth sessions: Meeting (real or figurative) and inhibition of the response to stressful stimuli [2].

**Results**

After gathering the data, Mean and Standard Deviation (SD) for pretrial and post trail were measured. Based on the results, the average age of 28.9 years and a mean of control group 27.2 years.

Table 1 describes the statistical pre-test and post-test scores for symptoms of obsessive-compulsive and subscales are in control and experimental groups. The results of the experimental group decreased. Before beginning to examine the hypothesis of normal distribution of variables, non-parametric tests were used Kolmogorov - Smirnov results shows, distribution of pre-post test control group and test variables with Kolmogorov normal distribution.

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Mean</td>
</tr>
<tr>
<td>Taught of Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checking</td>
<td>30</td>
<td>5/2</td>
</tr>
<tr>
<td>Cleaning</td>
<td>30</td>
<td>4/67</td>
</tr>
<tr>
<td>Doubting</td>
<td>30</td>
<td>4/6</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>14/46</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Kolmogorov-Smirnov Test</td>
</tr>
<tr>
<td>Taught of Group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checking</td>
<td>30</td>
<td>1/09</td>
</tr>
<tr>
<td>Cleaning</td>
<td>30</td>
<td>0/6</td>
</tr>
<tr>
<td>Doubting</td>
<td>30</td>
<td>0/75</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>0/78</td>
</tr>
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</table>

Table 2. Kolmogorov - Smirnov Test for the Normality of symptoms of obsessive – compulsive (MOCI) Scores.
distribution is not significant. Kolmogorov-Smirnov test results in Table 2 are shown.

According to the results (Table 3) \((257/75, F=1\) and \(27 \, dF=001/0 \, P=\)) is shown the effect of pre-test and post-test of the results of the groups elimination, the difference between groups in the there is a significant 95% confidence. Exposure and response prevention therapy can therefore be concluded (ERP) to reduce symptoms of obsessive-compulsive effective. Eta Square also indicates that 73 percent of test score changes in the variable group of obsessive-compulsive symptoms (difference between groups in the post-test) due to the implementation of the independent variables (exposure therapy and response prevention (ERP)).

According to the results of the groups eliminated, the difference between groups is significant at the 95% confidence level of significance. Thus, the null hypothesis is rejected and research scholars will be accepted. Exposure and response prevention therapy can therefore be concluded (ERP) reducing symptoms of obsessive-compulsive disorder checking. Eta Square also indicates that 63 percent of test score changes in the variable group checking symptoms of obsessive-compulsive (difference between groups in the post-test) due to the implementation of the independent variables (exposure therapy and response prevention (ERP)).

The results obtained (Table 5) \((826/47, F=1\) and \(27 \, dF=001/0 \, P=\)) is shown the effect of pre-test and post-test of the results of the groups eliminated, the difference between groups is significant at the 95% confidence level of significance. Thus, the null hypothesis is rejected and research scholars will be accepted. Exposure and response prevention therapy can therefore be concluded (ERP) reducing symptoms of obsessive-compulsive disorder washing. Eta Square also indicates that 59 percent of test score changes in the variable group washing symptoms of obsessive-compulsive (difference between groups in the post-test) due to the implementation of the independent variables (exposure therapy and response prevention (ERP)).

Table 3. The Summary of ANCOVA for Investigating the Effect of Pre-test and Effect of Group Symptoms of obsessive-compulsive (total score).

<table>
<thead>
<tr>
<th>Change Resource</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Eta Square</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Effect of Pre-test</td>
<td>5/282</td>
<td>1</td>
<td>0/097</td>
<td>5/282</td>
<td>2/912</td>
<td>0/099</td>
</tr>
<tr>
<td>The Effect of Group</td>
<td>136/533</td>
<td>1</td>
<td>0/736</td>
<td>136/533</td>
<td>75/257</td>
<td>0/001</td>
</tr>
<tr>
<td>Error</td>
<td>48/984</td>
<td>27</td>
<td>1/814</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3072</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4. The Summary of ANCOVA for Investigating the Effect of Pre-test and Effect of Group Symptoms of obsessive-compulsive (Checking score).

<table>
<thead>
<tr>
<th>Change Resource</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Eta Square</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Effect of Pre-test</td>
<td>0/183</td>
<td>1</td>
<td>0/015</td>
<td>0/183</td>
<td>0/424</td>
<td>0/521</td>
</tr>
<tr>
<td>The Effect of Group</td>
<td>17/058</td>
<td>1</td>
<td>0/594</td>
<td>17/058</td>
<td>39/42</td>
<td>0/001</td>
</tr>
<tr>
<td>Error</td>
<td>11/683</td>
<td>27</td>
<td>0/433</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>397</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 5. The Summary of ANCOVA for Investigating the Effect of Pre-test and Effect of Group Symptoms of obsessive-compulsive (Cleaning score).

<table>
<thead>
<tr>
<th>Change Resource</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Eta Square</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Effect of Pre-test</td>
<td>0/527</td>
<td>1</td>
<td>0/045</td>
<td>0/527</td>
<td>1/286</td>
<td>0/045</td>
</tr>
<tr>
<td>The Effect of Group</td>
<td>19/613</td>
<td>1</td>
<td>0/639</td>
<td>19/613</td>
<td>47/826</td>
<td>0/001</td>
</tr>
<tr>
<td>Error</td>
<td>11/073</td>
<td>27</td>
<td>0/41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>338</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 6. The Summary of ANCOVA for Investigating the Effect of Pre-test and Effect of Group Symptoms of obsessive-compulsive (Doubting score).

<table>
<thead>
<tr>
<th>Change Resource</th>
<th>Sum of Squares</th>
<th>Degree of Freedom</th>
<th>Eta Square</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Sig. Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Effect of Pre-test</td>
<td>4/484</td>
<td>1</td>
<td>0/179</td>
<td>4/484</td>
<td>5/883</td>
<td>0/022</td>
</tr>
<tr>
<td>The Effect of Group</td>
<td>9/633</td>
<td>1</td>
<td>0/319</td>
<td>9/633</td>
<td>12/637</td>
<td>0/001</td>
</tr>
<tr>
<td>Error</td>
<td>20/582</td>
<td>27</td>
<td>0/762</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0/323</td>
<td>30</td>
<td></td>
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</tbody>
</table>
will be accepted. Exposure and response prevention therapy can therefore be concluded (ERP) to reduce the symptoms of OCD obsessive doubt effective. Eta Square also indicate that about 32% of test scores in variable symptoms of a compulsive OCD (difference between groups in the post-test) due to the implementation of the independent variables (exposure therapy and response prevention (ERP)).

Conclusion

Based on the results achieved by exposure therapy and response prevention (ERP) to reduce symptoms of obsessive - compulsive effective.

Occasionally men thought so, too many unintended and sometimes the passion that behave in a way that is embarrassing or even dangerous. But only a few people who are suffering from obsessive compulsive disorder. Obsessive compulsive disorder (OCD) is an anxiety disorder in which a person's mind is full of thoughts, uncontrollable and persistent and determined person would have to repeat this exercise is that it causes distress and disruption in daily functioning [4].

Emphasis on dealing with provocative situations obsessive thoughts and compulsive avoid giving answers rooted in the efforts to develop behavioral and cognitive therapy - behavior is obsessive. This approach believe that the obsessive thoughts in the form of conditioning, stress response, are linked. In such a case, if these thoughts, for a considerable time, continually conditioning are not usually conditioned response anxiety, gradually reduced and eventually shuts down. But because occurrence compulsive behaviors by patients with OCD, anxiety does not decrease, and still continues. In fact, compulsive behaviors, behaviors that are willing to deal with obsessive thoughts, their end and therefore can relive anxiety or distress caused by obsessive thoughts. When compulsive behavior by reducing anxiety reinforces, its occurrence the likelihood of further. In addition, patients learn obsessive avoidance behaviors can be prevented obsessive thoughts, so as to deal with these thoughts, the more reduced. Therefore, exposure therapy and response prevention, the main goal of treatment is to put the person at the highest possible level of confrontation and at the same time, elimination is any kind of avoidance behavior. In this case, a conditional link between obsessive thoughts and anxiety responses, will be discrete and the person will be able to with their obsessive thoughts without being faced with high levels of anxiety [3]. Previous studies revealed that cognitive behavioral therapy is based on exposure and response prevention is effective in improving the symptoms of obsessive-compulsive disorder [1].

These findings explained that in this type of treatment in addition to identifying and correcting the negative assessments, thoughts interfering with the correct attitude of responsibility and prevent behaviors that neutralizing following a negative assessment by the sense of responsibility arises, Increased exposure and reduce avoidance behavior and So symptoms of OCD reduced.

References


