Original Article

Effect of Religious Cognitive Behavioral Therapy on Religious Obsessive-compulsive Disorder (3 and 6 months Follow-up)

Shahla Aouchekian, Roya Karimi, Mostafa Najafi[1], Katayon Shafiee, Mohammadreza Maracy[2], Asiyeh Almasi[1]

From the Behavioral Sciences Research Center, Isfahan University of Medical Sciences, [1]Psychosomatic Research Center, Isfahan University of Medical Sciences, [2]Department of Epidemiologic and Statistical, Isfahan University of Medical Sciences, Isfahan, Iran

Abstract

Background: Obsessive-compulsive disorder (OCD) is a chronic disorder that strongly affects one's life and social, emotional, and occupational functioning. Due to the effect of religious beliefs on phenomenology of OCD, in this paper, we assess the effectiveness of religious cognitive behavioral therapy (CBT) within 3 and 6 months follow-up. **Materials and Methods:** This study is a clinical trial with follow-ups which last 2 months consisting eight sessions of 1.5 h of religious CBT. The research is conducted in a group of 40, with pre- and post-test after 3 and 6 months. Used Yale-Brown OCD symptom scale, before, the end, after 3 months and after 6 months of intervention. Treatment is carried out by a psychiatrist and a clergyman through religious CBT. The trial is held in OCD clinic affiliated with Noor Hospital. Results are analyzed by ANOVA repeated measure with SPSS18. **Results:** The results showed a considerable decrease in OCD symptoms which remained almost persistent after 3 and 6 months (F = 3/54. *P* = 0/024). It also shows that religious CBT can leave substantial effect on OCD symptoms; permanency of this intervention after 3 and 6 months is noticeable (P < 0/001). In Conclusion this therapy could be helpful for OCD patients with religious content. **Conclusion:** RCBT have a positive effect on people with religious obsessive -compulsive.

Keywords: *Obsessive-compulsive disorder, religious cognitive behavioral therapy, religious content obsessive-compulsive disorder*

Introduction

Obsessive-compulsive disorder (OCD) is one of the most common psychiatric disorders after phobia, drug-related disorders, and depression[1] and is the tenth debilitating disorder according to the World Health Organization and has a prevalence of 1%–4% of the general population and 10% of outpatients of psychiatric clinics.[2] OCD is a chronic and debilitating disorder that encompasses cognitive, emotional, and behavioral aspects and affects social, occupational, and familial functioning.[3] OCD is characterized by obsessive thoughts or rituals that cause distress and often disrupt a person's daily life. Obsessions are thoughts, impulses, and images that a person considers them foolish. Compulsive behaviors or rituals are deliberate repetitive behaviors or mental activities that are carried out in response to obsession. These actions are applied specially for suppression or neutralization of distress or to prevent a dreaded event. However, these reactions may not always be obvious to the person who monitors these behaviors. Rituals (or irrational repetitive behaviors) same as obsessions are considered to be unreasonable or excessive by the patient.[4] Diagnosis OCD requires that the person be aware of the fact that in some cases, his/her obsessions and compulsive behaviors are unrealistic and excessive. It is believed that patients, who most of the times are not aware of this situation, are obsessed with poor insight.[5] This chronic and debilitating disorder is such that its dysfunction is comparable to that of schizophrenic disorder.[6] Most social dysfunction is common when the symptoms of OCD are intensified. These patients often have low levels of self-esteem and a feeling of shame and dissatisfaction with their social function and often avoid activities that connect with others.[7] Cultural, moral, and religious values of one can affect the phenomenology of symptoms[6] and OCD is no exception; according to studies, this disorder is not more common in religious people but being religious is effective in patient's symptomatology.[8,9] This means that if religious patients suffer OCD,

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Address for correspondence:
Dr. Roya Karimi, Department of Psychiatric, Medical School, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail: dr.royakarimi@yahoo.com

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their obsessive content is mainly emerged in the field of beliefs and rituals.[10] This type of content is an important guide in understanding the nature of this disorder. Obsessions' content reflects the major concern of each era, whether the contents are related to the work of demons and contamination by microbes, or whether related to radiation or the risk of AIDS. Although the first and most comprehensive study of this disorder was done by Janet in 1903, but until Freud did not open the way to a deeper understanding of this disorder and its clinical description, this disorder was not well understood.[11]

The results from clinical and preclinical trials suggest that the dopamine system may be involved in the pathogenesis of OCD[12] and it is proposed as the reduction of phase 1 in stimulation of D1 receptor in obsessive patients.[13] Despite the limited number of studies, the results of further research imply a link between OCD and increase of dopamine neurotransmission in the brain, and the hypothesis of an increase in dopamine neurotransmitter in the basal ganglia is agreed.[14] In addition, growing evidence supports the role of Basal ganglia dopaminergic neurotransmission and midbrain that decrease the ability of frontal cortex to suppress emotional responses made in the amygdale.[12]

Another neurotransmitter involved in the etiology of OCD is glutamate. In recent years, several lines of evidence have emphasized glutamatergic dysfunction in brain corticostriatal thalamic-cortical circuitry in the etiology of OCD.[12]

The importance of glutamate in the pathophysiology of OCD is proven and that causes the use of effective drugs on glutamatergic system in addition to the serotonergic drugs.[15,16] That's why the glutamatergic factors are new candidates in the treatment of OCD.[16,17]

Studies have shown that about 40% of OCD patients do not respond to selective serotonin reuptake inhibitor.[18] Search for second-line treatment strategies are clinically important in OCD patients because OCD patients are less responsive to treatment than other anxiety disorders and probability of spontaneous recovery is low in OCD,[19,20] because of this reason using psychological therapy can be more effective to treatment OCD.

However, weakness in psychoanalytical approach in the treatment caused the formation of other approaches, such as approaches to biological, behavioral, cognitive, and behavioral associated with symptoms, phenomenology, etiology, and treatment of this disorder. It has been proven that cognitive behavioral therapy (CBT) is the most effective treatment for OCD.

In another hand faith, religious beliefs, religious orders, and religious ceremonies are factors that can effectively be used in the treatment and prevention of mental disorders.[11]

Addressing the treatment of religious reasons can be summarized as follows: (1) support, one of the reason of added religious training on psychotherapy is religious social protection of human, actually religious, create a support space for human; (2) physiological affect, the emotions such as hope, contentment, and love in religious can effect on immune system and improvement human healthy; (3) religious rituals, because religious has special rituals, the therapist can use these rituals on therapy and are more effective on treatment; and (4) coping style, as a mediator to explain and justify spirituality and mental health, especially in stressful conditions (25).

One of the aims of the present study is linking information of psychiatric and psychological science regarding OCD with religious resources, ideas, and principles of jurisprudence about obsession. Due to the gap in the religious treatment and need of nonmedical interventions and use of rich sources of Islam (Quran, hadiths, sayings and the Agenda jurisprudential Islamic law) in the field of religious beliefs and rituals, a cognitive-therapy protocol with religious content is developed and is conducted in the OCD clinic. In the past two decades, the use of religious methods and beliefs to treat anxiety, obsession, and depression disorders have been considered and analyzed by researchers and Psychotherapists and there are also reports about the effectiveness of this method.[21-23]

However, the main issue and challenge in this context is how effective this treatment is and how long it persists, which different views are presented in this regard. That's why we decided to study the effects of religious cognitive therapy on obsession symptoms within 3- and 6-month follow-up.

Materials and Methods

Study design and participants

Sampling is done by convenient sampling. The group consists of forty OCD patients with religious content, who are chosen by Cochran's sample size formula, from obsessive clinic depend on Noor Hospital in 2014. IRCT2016040927305N1 and ethical university code: 293117. This study is a single group study without control group, because in before studies this treatment was tested and the effectiveness confirmed, and this paper, in this study the group was under drug and religious cognitive therapy at the same time. Methods of the study are that patients receive drug therapy at least for 6 months, and during the treatment period, there are no changes in the type or dose of medication and when entering the study their Yale-Brown score should equal or higher than 17. Therefore, medication and its type are not considered as a variable and the studied population is all OCD patients referred to the OCD clinic in Shariati Clinic. Inclusion criteria included patients with religious content OCD, lack of psychosis, the belief in Islam, the lack of mental retardation and physical disabilities and acceptance and cooperation in study from the patient; exclusion criteria were unwillingness of the patient to

complete the period or fill out the questionnaire, refusing to stay in the study, develop physical debilitating illness during the study so that he/she will not be able to cooperate, move, and comprehend.

Yale-Brown questionnaire is completed by the Master of Psychology before the study, after intervention, 3 months after intervention, and 6 months after the intervention. The trial is formed of eight sessions of 1 h and a half, once a week. The content of the sessions is determined according the treatment protocol developed by researchers in the study that are approved by the university and seminary professors [Figure 1].

Variable assessment

Yale-Brown scale was formed in 1989 by Goodman *et al*. This scale assesses five areas for OCD that includes distress, intervention, obsession, compulsion, and control. This scale consists of ten sections; each section contains two parts, and each part of the scoring 0–4. Ranking for each subscale (OCD) is from 0 to 20 and the total scale of 0–40. This is a nonstructured interview to assess symptoms, their severity and response to treatment in OCD patients. This scale examines obsession and compulsion separately and contains over fifty common OCDs including obsessive thoughts about aggression, impurity and sexual issues and compulsives about cleanliness, checking, arrangement and collecting and storing. In 2005, during a study, Bayanzadeh reported the reliability of this scale up to 98%, with internal consistency coefficient of 0.89 that its cutoff point is above 17.[24]

Y-BOCS TOTAL(add items 1-10) ☐ Date Day Mth. Year Rater

Patient Name **Patient id**

	Obsessions	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
1	TIME SPENT ON OBSESSIONS	☐	☐	☐	☐	☐
1b	Obsession-free interval (do not add to subtotal or total score)	☐	☐	☐	☐	☐
2	INTERFERERENCE FROM OBSESSIONS	☐	☐	☐	☐	☐
3	DISTRESS OF OBSESSIONS	☐	☐	☐	☐	☐
4	RESISTANCE	☐	☐	☐	☐	☐
5	CONTROL OVER OBSESSIONS	☐	☐	☐	☐	☐
	OBSESSION SUBTOTAL(add items 1-5)	☐				

	Compulsions	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
6	TIME SPENT ON COMPULSIONS	☐	☐	☐	☐	☐
6b	Compulsion-free interval (do not add to subtotal or total score)	☐	☐	☐	☐	☐
7	INTERFERENCE FROM COMPULSION	☐	☐	☐	☐	☐
8	DISTRESS FROM COMPULSIONS	☐	☐	☐	☐	☐
9	RESISTANCE	☐	☐	☐	☐	☐
10	CONTROL OVER COMPULSIONS	☐	☐	☐	☐	☐
	COMPULSION SUBTOTAL(add items 6-10)	☐				

Figure 1: Yale-Brown obsessive compulsive scale

After clinical interview by psychiatrists and psychiatric residents and evaluation of the religious content obsession, collection of data is done by psychologist through demographic questionnaire and Yale-Brown scale.

The frame of sessions

- First section: Introduction of OCD, causes, and factors
- Second section: OCD from religious perspective
- Third section: Characteristics and consequence of irrational thought
- Forth section: Concepts related OCD (obedience)
- Fifth section: Concepts related to OCD (doubt and certainty)
- Sixth section: Concepts related to OCD (jurisprudence)
- Seventh section: Concepts related to OCD (cleaners)
- Eighth section: The amount of water needed for cleaning from religious perspective.

Statistical analysis

To describe the qualitative variables, frequency is used, and for quantitative variables, mean and standard deviation (SD). Test results are reviewed by repeated measure ANOVA with SPSS18 (Inc, Chicago, Illinois, USA). software, Behpardazan software, Iran, and $P < 0.05$ is considered statistically significant level. The researchers at all stages are committed to the provisions of the Code of Ethics and Ethics Committee of the Ministry of Health, Isfahan University of Medical Sciences. Written consent is obtained from patients.

Results

This study includes forty patients (one group) with religious content OCD who are referred for treatment to the obsession clinic depend on Noor Hospital in 2014. All cases are of the women with age range 21–62 years, with mean and SD of (11.1) 37, which 90% of them are married and highest grade is diploma and about 80% of them are housewives. More details are given in Table 1. Shapiro–Wilk test approved the normal distribution of Yale-Brown score before, after, 3 and 6 months after the intervention.

Table 1: Frequency, age, gender, and marital status in the sample

Variable	Frequency (%)
Education	
Elementary	13 (30.5)
Diploma	17 (42.5)
High school	5 (12.5)
License and higher	5 (12.5)
Occupation	
Housewife	32 (80)
Student, retired, self-employed	8 (20)
Marital status	
Single	4 (10.3)
Married	35 (89.7)

The mean (SD), Yale-Brown score range (maximum–minimum) and economical state of the process.

The basic analysis showed that, between Yale-Brown score, education, occupation, and marital status, there is no relationship, just age variable has controlled during analyses. Analysis of repeated measure on quasi-experimental without control group (40 patients) show that the trend is statistically significant ($P = 0.024$). This means that the intervention could reduce Yale-Brown score after intervention and this reduction was stable in the 3th and 6th month (no changed after 3 and 6 months). The reduction of Yale-Brown score means that OCD symptoms reduce during intervention and this intervention was effective on OCD symptoms that it can be stable up to 6 months ($P < 0.05$). The result of *post hoc* showed that the baseline scores after 3 and 6 months are significant, while between after 3 months and 6 months are not significant [Figure 2].

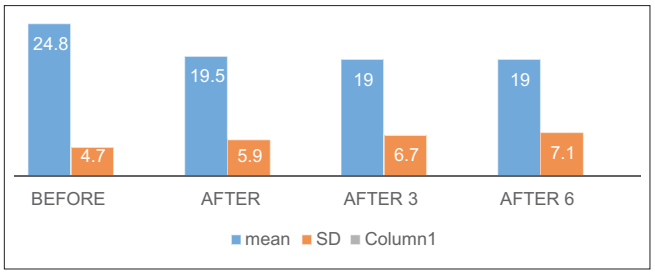

Figure 2: The mean (standard deviation) of Yale-Brown before, after, 3 and 6 months after intervention

Table 2: Average Yale-Brown score before, after, 3 and 6 months after the intervention using ANOVA repeated measure

Variable	Mean (SD)	Variation range	Socio demographic characteristic	
			P	$F_{(3,36)}$
Yale-Brown score				
Baseline	24.8 (4.7)	17-35	0.024	3.54
After intervention	19.5 (5.9)	10-30		
3 months after intervention	19 (6.7)	5-31		
6 months after intervention	19 (7.1)	5-32		

SD: Standard deviation

Discussion

This study is done after eight sessions of religious CBT on forty patients with religious content OCD; this study is a single group study without control group because before this treatment was tested and the effectiveness confirmed, the majority of participant were women, with a mean age and range of 21–62 and about 90% of them are married, the highest grade is diploma and 80% of them are housewives. Apart from age, other demographic variables such as sex, marital status, level of education, occupation, and duration of disease are not significantly different therefore none of the above could have affected the outcome of the study. Finally, the results of ANCOVA showed a significant reduction in OCD symptoms that persist after 3 and 6 months which are shown in Table 2; this is the most fundamental issue of this paper. Hence, religious CBT can have a positive effect on religious content OCD; also, the durability of the treatment effect is remarkable. Result of the above study is consistent with previous research on the impact of religious CBT intervention on religious content OCD. In support of this hypothesis can be noted, that in the OCD there are fears such as incorrect and exaggerated assessment of the threat, too much negativity about threatening events and extreme response to these perceived threats, the Patients interpret their thoughts, images, and impulses as very important and meaningful and dysfunctional beliefs underlying the formation of these thoughts, images, and impulses; therefore, irrational repetitive behaviors are done to reduce the possible damage, but because they never really assure safety, they are repeated. On the other hand, because these people live in a society where religious beliefs are dominant in their educational system, symptoms of OCD are manifested in behavior and religious beliefs. Hence, religious CBT is effective on religious content OCD patients; because this treatment is consistent with their religious beliefs, also affects patient's cognitive aspect by finding false and negative evaluation of beliefs and rituals and modify them; moreover, they have an impact on aspects of their behavior with neutralizing the faulty behavior contrary to the right rituals by learning new habits and replacing it. Therefore, the combination of religious content with CBT and medication can further improve religious content OCD patients. It is suggested in another study, to compare religious CBT with classical CBT in treatment of these patients.

This study produced results which corroborate the findings of a great deal of the previous work in this field: Akouchekian (1386), the impact of religious treatment on quality of life in patients with OCD, which shows results of quality improvement of life after religious CBT;[22] Moalemi (1380), comparison of religious counseling with behavior therapy in treating religious content OCD patients;[25] and Almasi and Akouchekian (1388), the impact of religious CBT on symptoms of obsessive and marital satisfaction in OCD patients, which shows results of reducing the severity of symptoms and also an increase in marital satisfaction after treatment.[26]

Baraga *et al*., 2005, in a study entitled CBT of OCD patients with a one-year follow-up;[27] Hedman *et al*. in a study as effect of CBT on patients with social anxiety disorder at follow-up of 5 years in 2011;[28] and Kendall in a study in 1996 as the effects of CBT on patients with anxiety disorders with long-term follow-up[29] emphasize

the persistence of CBT on OCD. Although our time review is shorter due to executive constraints in comparison with mentioned studies, in this study is noticeable.

Limitation

There were execution problems and limitations in this study; because intervention is group therapy, the number of participants in one group will be around 15 patient in each period, thus for reaching the preferable sample size, we had to hold at least three cycles of therapy sessions. Of course, for accuracy and consistency of the results, type of intervention and the intermediates were quite the same. Becaouse of the nature of this disorder, the patient during dealing with OCD often low-trust issues, due to this reason the patients couldn't trust researchers for assessment.

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Conflicts of interest

There are no conflicts of interest.

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