

Comparison of Effectiveness between Thought Stasis, Flooding, and Regular Desensitization Techniques on OCD Patients' Washing Obsession

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Abstract: Introduction: This research was carried out with the purpose to compare effectiveness of Thought Stasis, Flooding, and Regular Desensitization techniques on OCD patients' washing obsession. Methodology: Research's sample includes 60 patients affected with Obsessive-Compulsive Disorder the affection of whom based on Yael Brown's Obsessive-Compulsive Scale had been confirmed. The sample was selected through simple random sampling method from the research's society and it was randomly divided into 4 groups each with 15 patients, 3 of which formed the examinee groups and the fourth group was designated as the control group. Yael Brown's Obsessive-Compulsive Questionnaire (1989) as the pre-test and post-test was performed on all the four groups. On the examinee groups, Thought Stasis, Flooding, Regular Desensitization techniques were respectively executed. The control group during the research execution was in the waiting list. Research's data using SPSS software and variance analysis were analyzed. Findings: results showed that 1. Thought Stasis technique exerted no significant effect on washing obsession of OCD patients and 2. Flooding and Regular Desensitization techniques had significant effect on washing obsession of OCD patients. Conclusion: behavior therapy techniques are effective on reduction of OCD patients' washing obsession. [Javad Khalatbari, Eshagh Samkhaniyani, Shohreh Ghorbanshirodi, **Comparison of Effectiveness between Thought Stasis, Flooding, and Regular Desensitization Techniques on OCD Patients' Washing Obsession** . *Life Sci J* 2013;9(3):2619-2624] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 380

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Introduction

Mental disorder is a disease with psychological or behavioral demonstration accompanied with considerable malaise and functional disorder caused by a biological, social, psychological, genetic, physical or chemical disturbance. Mental-behavioral obsession disorder or obsessive-compulsive disorder (OCD) (Kaplan & Sadouc, 2001) in DSM-IV-TR classification is amongst anxiety disorders and expresses itself as durable beliefs and mental images, shocks, thoughts (ideas) or repetitive patterns of behavior or actions. These disorders if not timely treated become chronic and will accompany the individual for years and in serious cases disturb individual's familial and social and occupational relationships (Wilson, 2006, Jamalifar). World Health Organization has announced OCD amongst the ten disabling diseases worldwide and has mentioned that this disease causes loss of income, decrease in living quality and inability as a result of depression. Therefore, increasing general awareness among these patients results in quicker identification and treatment of the disease. Although mental-behavioral obsession disorder usually starts in adolescence or early in the adulthood, it may start during childhood. Mean starting age in men is lower than in women, i.e. between 6 and 15 years amongst men and between 20-29 years for women (Lee Bauer, 2004; Kouhi).

Social studies have estimated general breakout of this disorder 2.5% and its one-year outbreak in adults 2.1-5%. Fourth edition of the revised edition of Psychological Disorders Diagnostics and Statistical Manual (DSM – IV – TR) have set the following criteria for identification of this disorder: Nearly 55 to 60 percent of patients respond to current medicines (Termer et al, 1988). For behavior-therapy, success rate has been reported 75 to 80 percent. But disease relapsing rate after stopping the treatment is high and about 25% of patients do not respond to any of the mentioned treatments. Treatment of obsessive thoughts is by far more difficult than treatment of obsessive actions. In such cases, cognitive-therapy may probably promote improvement rate (Beck and Vishar, 1989). Therefore, cognitive-behavioral therapy focuses on identification and correction of negative evaluation of obtrusive thoughts and increase of obsessive confrontation and on reduction of avoiding behaviors (Dimal et al, 1966). In Flooding method, individual for a relatively long time is exposed to terrifying or daunting stimulus to the full intensity. There are six controlled studies (Rochman, Hodson & Marks, 1971; Hodson, Rochman and Marks, 1972; Rochman, Marks & Hodson, 1973; Ropper, Rochman & Marks, 1978; Salsman & Taller, 1971). These studies have reported a significant improvement of two third of patients and the follow-up study for six months showed that

this improvement has been preserved in 90% of respondents (Emel Kamp, Hukstra, Dyser, 1985; O'Sullivan, Noushirvani, Marks and coworkers, 1991; Fokuzak, 1993). Shipero (1982) in meta-analysis of 143 studies which included 10 studies on Flooding technique, average effect of this treatment technique has announced 1.12 which in total is a significant effect and slightly stronger than other treatment techniques (Prochaska, 2004: 322). In Regular Desensitization, after creating a muscular relaxation, first, the patient is exposed to what creates the least anxiety and eventually to maximum anxiety (Ahmadi, 1990). McGlin and Linder (1971) in a research showed positive effect of Regular Desensitization on obsession (Paul and Lindsey, 2000: 30). Research by First Kevir (1970) suggested that Desensitization alone has no effect in treatment of obsession. In Thought Stasis method, therapist asks patient to take to one's obsessive thoughts and then therapist shouts at him/her: "that's enough!" and this action immediately leads to suspension of verbal behavior or obsessive thoughts (Seif, 2006). Salkoviks and Varic (1989) in a research, have not considered Thought Stasis of much efficacy for improvement of obsessive thoughts and this conclusion is consistent with views of Marks (1981), Rochman, Hodson, and Marks (1975), and Louis and Mira (1971). Hackman and Maclean (1975), Likerman and Rochman (1982), Stern, Lipzodi and Marks (1987) all applied Thought Stasis technique to people affected with obsessive thoughts and results showed that in most patients, complaint about obsessive thoughts still existed.

Tozendejani and Kamalpour (2004) did a research on "How to Cope with Obsessive Actions and Thoughts", in which 31 patients were divided in 4 therapy groups. To one group, medicinal therapy, to the second group, Behavior-cognitive therapy, to the third group, a combination of these two therapies, and to the last group no therapy was applied. The obtained result showed that combination of drug-therapy and cognitive-behavioral therapy relative to each one of the therapies had greater effectiveness.

The research under title of "Study of Relative Efficiency of Cognitive-Behavioral, Medicinal Techniques, and Combination of these Two Techniques in OCD Treatment" by Ahmadi, Ali Delavar and Azad (2004) showed that Cognitive-Behavioral Therapy except in depression improvement index, in other indices compared to Drug-therapy was superior and combination of drug-therapy and cognitive-behavioral therapy had the greatest effect in OCD treatment.

Research purpose

1. Specifying effectiveness of behavior-therapy techniques which are Thought Stasis, Flooding, and Regular Desensitization in reducing symptoms in patients affected with OCD disorder.
2. Offering useful and sustainable solutions in treatment of obsessive-compulsion disorder and speeding up the treatment time.

Research's questions are:

1. Are behavior-therapy techniques effective on obsession degree of OCD patients?
2. Is there significance difference between effectiveness of Thought Stasis, Flooding and Regular Desensitization treatment techniques in reducing obsession of patients affected with OCD disorder?

Tools:

The tool used in this study is Yael Brown's Obsessive-Compulsive Scale which in 1989 was prepared by Goodman and coworkers. This questionnaire has two scales for obsessive-compulsive disorder. In both scales, the symptoms are assessed based on frequency, duration, resulted anxiety, pathological effect and interference with patient's life, resistance and control degree during 7 days before interview and based on a semi-structured interview for assessment of symptoms, disease intensity and response to OCD patients' treatment. Yael Brown's list of symptoms includes 50 prevailing obsessions and compulsions around aggression, pollution, sexual desire, and compulsions about cleanness, checking, order, collecting and piling. Bayanzadeh (2002) has stated the scale's stability in 40 patients 98% and its internal consistency coefficient 89%. Dadfar (1997) has reported congruent validity with Moderly's Obsessive-Compulsive Scale 78% and the test's total stability coefficient 84% and congruence validity of Yael Brown's Obsessive-Compulsive Scale 87%.

Research's methodology

Society, sample and sampling method:

Present statistical society includes all women visiting psychiatry and counseling centers of Ghaem-Shahr city, Shahid Zare Hospital of Sari, and Obsession Curing Center of Tehran in 2008-2009 from which a sample has been identified and selected as patients affected with washing obsession using Yael Brown's Obsessive-Compulsive Scale. The sample comprised 60 persons selected randomly who were divided in three examinee groups and one control group. The examinee groups each underwent Thought Stasis, Flooding and Regular Desensitization treatment techniques, respectively, and the control group

Table of sample's characteristics

Examinee groups	Education				Age				Total
	High school diploma	Junior college diploma	Bachelor degree	total	15-20 years	20-25 years	25-30 years	30-35 years	
Thought Stasis	2	-	13	15	-	8	5	2	15
Flooding	4	2	9	15	1	4	5	5	15
Regular Desensitization	1	1	13	15	-	6	7	2	15
Control group	5	2	8	15	-	6	8	1	15
Total	12	5	43	60	1	24	25	10	60

Hypothesis1. Behavior-therapy techniques are effective in reduction of washing obsession of the OCD patients.

Change source Groups	SS	df	Ms	F	P ₁
Between-group	83.4	3	27.8	16.92	0.000
Within-group	914.93	56	16.34		
total	1745.32	59			

Hypothesis2. There is (significant) difference between effectiveness of Thought Stasis, Flooding and Regular Desensitization techniques in reduction of OCD patients' washing obsession.

(i) Group	(J) Group	Mean difference	St. deviation	Sig
Flooding	Thought Stasis	-6.533*	1.476	0.000
Thought Stasis	Regular Desensitization	6.533*	1.476	0.000
Regular Desensitization	Flooding	6.000*	1.476	0.001
Control	Flooding	10.400*	1.476	0.000
	Thought Stasis	3.867*	1.476	0.880
	Regular Desensitization	4.400*	1.476	0.040

received no treatment during execution of the research.

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stability coefficient 84% and congruence validity of Yael Brown's Obsessive-Compulsive Scale 87%.

Research's execution method

The research's method is of experimental type through initial random sampling and after selection of examinees with washing obsession, at the second stage, 3 examinee groups and 1 control group have been replaced and effectiveness of Thought Stasis, Flooding and Regular Desensitization techniques as the independent variables and washing obsession as the dependent variable were investigated. Yael Brown's Obsessive-Compulsive Scale was given out to people (pre-test) and after that the stage of treatment interferences took place so as on the first examinee group Flooding technique, on the second group Thought Stasis technique and on the third group Regular Desensitization technique in 10 sessions once a week was executed and after 4.5 months all members of examinee groups and control group at the same time were assessed by Yael Brown's Scale (post-test).

Data statistical data

The results obtained from the research execution using descriptive and inferential statistical methods were analyzed.

Based on the obtained results and given that the calculated f ($f = 16.942$) is greater than the f obtained from the table ($f = 4.16$), $\frac{\alpha}{2} = 0.01$, with freedom degrees (56, 3), H_0 is rejected and the opposite hypothesis is confirmed. Given significance of difference between means with 0.99 confidence we state that behavior-therapy techniques are effective in reduction of OCD patients' washing obsession.

Since the calculated Tukey for comparison of Flooding and Thought Stasis (HsD: 6.16) is greater compared to Tukey obtained from the table (HsD: 2.78), $\frac{\alpha}{2} = 0.05$ with freedom degrees of (3, 56), the zero hypothesis is rejected and the opposite hypothesis is confirmed. With 0.95 confidence we state that effect of the two methods, i.e. Flooding and Thought Stasis, on OCD patients differs from each other and effect of Flooding method is greater than that of Thought Stasis. Since the calculated Tukey for comparison of Thought Stasis and Regular Desensitization (HsD = 0.512) is very smaller than the Tukey obtained from the table (HsD: 2.78), $\frac{\alpha}{2} = 0.05$ with freedom degree (3, 56), the zero hypothesis is confirmed and the opposite hypothesis is rejected. With 95% confidence it can be stated that effect of the two methods, i.e. Thought Stasis and Regular Desensitization, does not differ significantly. It means that Thought Stasis had the least effect.

Discussion and conclusion

Present research's findings showed that:

1. Behavior-therapy techniques including Thought Stasis, Regular Desensitization and Flooding are effective in reducing washing obsession of OCD patients. Van Balkom and colleagues (1994) after meta-analysis of previous researches on OCD concluded that behavior therapy and anti-depression drugs and combination of these two with each other has been much more effective than Placebo treatment and the assessments showed that behavior therapy is more effective than use of anti-depression drugs alone (James O. Prochetska & John C. Nocross, 2003: 391). based on behavioral treatments, patients' negative evaluations and primary assumptions are challenged and the purpose of it is to correct patients' negative beliefs about their personal accountability. Patient describes for therapist all the factors which cause anxiety producing results in him/her and in a table the patient specifies the share of each factor. This type of tests is very effective for direct measurement of evaluations and assumptions about patients' obsessive issues, because patient during this

process tests one's previous threatening descriptions against a new and non-threatening description and observes its result and effect in one's behaviors and actions.

2. There is significant difference between effectiveness of Flooding, Regular Desensitization and Thought Stasis therapy techniques so as they can be prioritized as below:

1. Flooding
2. Regular Desensitization
3. Thought Stasis

And this result is consistent with results obtained by Frest and Cooper (1970) and Morgan Stern (1972) and inconsistent with results obtained by Emkamp and colleagues (1980) and Emkamp and Kiven (1977). In another research by Emkamp and colleagues (1980), Thought Stasis together with Self-Assertion Training was effective in treatment of obsessive thoughts and Emkamp and Kiven (1977) found Thought Stasis technique and long-term imagined confrontation effective in improvement of obsessive thoughts the inconsistency of which with the present research can be due to use of other techniques together with Thought Stasis technique while in present research Thought Stasis technique was used alone. given the results obtained from this research and its comparison with prior research, it can generally be concluded that all the behavioral techniques are not effective in improvement of OCD patients' symptoms and efficiency of various techniques differs from each other. Therefore, for treatment of OCD patients both the type of symptoms and their intensity should be paid attention to and then a treatment corresponding to them should be selected.

3. Thought Stasis technique is not effective in reduction of washing obsession intensity in OCD-patients and the above results is consistent with results obtained in studies done by Salkovicks and colleagues (1989), Stern (1978), Stern, Lipzedi and Marks (1978), and Lickerman and Rochman (1982).

Discussion: hiding obtrusive and negative thoughts in these patients is one of the protective behaviors employed by them which may extend the symptoms' presence. In addition, when an individual prohibits oneself from certain thought and action or punishes oneself for committing that action or thought, that thought or action will be reinforced, because repeated prohibition of a thought or action in excessive form will reinforce it.

4. Regular Desensitization is effective in reduction of mental-behavioral obsession intensity in patients affected with washing obsession and results of the above research is consistent with findings of First and Cooper (1970), Maclean and Linder (1971). if a relaxing response is accompanied with anxiety

producing stimulus, the learned consistency between relaxation and washing obsession weakens the anxiety producing response, i.e. washing obsession until when it is eventually extinguished. And when patients' anxiety disappears, their fear for dire consequences of not-performing obsessive formalities will fade away.

5. Flooding technique is effective in reducing mental-behavioral obsession of patients affected with washing obsession. This result is consistent with findings of Shipero (1982). when the patient is put in position of confrontation with a stimulus, patient's anxiety through habituation process disappears and this gradually facilitates the association with terrifying situation and the patient observes that there is no dire consequence for one and one's obsessive behavior has had no reason.

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