

## EFFICACY OF BEHAVIOUR THERAPY IN THE TREATMENT OF OBSESSIVE COMPULSIVE DISORDER

Saima Dawood and Fakhar Jehan

Centre for Clinical Psychology, University of the Punjab, Lahore, Pakistan

### ABSTRACT

**Objective:** The present study aimed to see the efficacy of Behavior Therapy along with pharmacological treatment (treatment group) in the treatment of obsessive compulsive disorder with depressive symptoms than pharmacological treatment alone (control group).

**Research Design:** An experimental (AB) design

**Place and Duration of study:** Lahore

**Sample and Method:** The total sample consisted of 20 therapy naïve clients with Obsessive Compulsive disorder. Ten clients (8 women & 2 men) were enrolled in the treatment group and 10 clients (4 women & 6 men) were in control group. Clients in treatment group received Behavior Therapy comprising of Psycho-education, Relaxation Exercise; Imagery Exercises, Thought Stopping, Exposure with Response Prevention (ERP), Flooding and Satiation strategies within 11 individual sessions of 45 minutes duration on twice a week basis. The pre and post treatment assessment were carried out by using the Scale I & IV: Depression and Obsessive Compulsive disorder of <sup>1</sup>Symptom Checklist-Revised and baseline charts

**Results:** Post treatment assessment revealed significant improvement in treatment group as compared to control group.

**Conclusion:** On the basis of present results, it could be concluded that Behaviour Therapy is effective for the treatment of Obsessive Compulsive Disorder.

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**Key Words:** Behavior Therapy; depression, obsessive compulsive disorder

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<sup>1</sup> Rahman, N. K., Dawood, S., Jagir, S., Rehman, N., & Mansoor, W. (2009). Standardization and validation of Symptom Checklist-R on psychiatric and non-psychiatric population. *Pakistan Journal of Psychology*, 2, 21-32.

## INTRODUCTION

Obsessive Compulsive disorder affects between 2-3% of the population, more often women than men; usually begins in early adulthood often following some stressful event<sup>2</sup>. Obsessive Compulsive disorder is characterized as Obsessions and Compulsions where Obsession is defined as “recurrent and persistent thoughts, impulses or images that are experienced at some point during the disturbance as intrusive and inappropriate and that cause marked anxiety and distress” and Compulsions are defined as “repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that person feels to driven in response to an obsession or according to rules that must be applied rigidly” (p.207)<sup>3</sup>.

The perspective related to etiological factor has been shifted from religious to medical one over the period of time; however, in the beginning of 20<sup>th</sup> century, many theorists also gave their psychological explanations for OCD as well. The studies conducted by McGuffin and Reich<sup>4</sup> on monozygotic and dizygotic twins suggest genetic predisposition because high concordance rate was found in monozygotic with absence in dizygotics and more prevalence in first degree relatives of OCD than in population at large.

Meyer and Chesser<sup>5</sup> viewed it as a learned behavior reinforced by its consequences. Hodgson and Rachman<sup>6</sup> viewed compulsive hand washing as an operant escape response that reduces an Obsessional preoccupation with contamination by dirt and germs and compulsive checking as reduction of

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<sup>2</sup> American Psychological Association (1994). *Diagnostic and Statistical Manual of Mental Disorders, 4<sup>th</sup> ed. (DSM-IV)*. New Delhi: Jaypee & Brothers Medical Publishers, Inc.

<sup>3</sup> Davison, G. C. & Neale, J. M. (1998). *Abnormal psychology (8<sup>th</sup> ed.)*. NY: John Willey & Sons, Inc.

<sup>4</sup> McGuffin P, & Reich, T. (1984). Psychopathology and genetics. In H. E. Adams & P. Sutker. (Eds). *Comprehensive handbook of pathology*. NY: Plenum

<sup>5</sup> Meyer, V. & Chesser, E. S. (1970). *Behavior therapy in clinical psychiatry*. Baltimore: Penguin.

<sup>6</sup> Hodgson, R. J. & Rachman, S. J. (1972). The effects of contamination and washing on obsessional patients. *Behavioral Research and Therapy, 10*, 111-117.

anxiety in an anticipation of disaster until checking rituals not completed. Rachman and DeSilva<sup>7</sup> emphasized that most of the normal people experience unwanted thoughts in similar content to Obsessions but individuals having OCD symptoms interpret such unwanted thoughts more seriously with more intensity and shows great concerns over it which consequently led them into serious pathology. Rachman and Hodgson<sup>8</sup> suggested high comorbidity with depression as it has been observed that Obsessive Compulsive patients have significant depression as well as OCD symptoms could be developed during an episode of depression.

Regarding treatment, learning theorists proved themselves very effective in the conceptualization and treatment for Phobic disorders so the same principles would be applied to OCD. Resultantly, Behavior interventions yielded 60-70% improvement after brief treatment and found to be free of side effects. There is empirical research evidence which suggests that Behavior techniques included Relaxation technique, Imagery Exercises, Thought Stopping, Exposure with Response Prevention (ERP) and Satiation<sup>9,10,11,12,13</sup> produce significant changes in rituals as compulsions: cleaning or checking and recurrent thought as

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<sup>7</sup> Rachman, S. J. & DeSilva, P. (1978). Abnormal and normal obsessions. *Behavioral Research and Therapy*, 16, 233-248.

<sup>8</sup> Rachman, S. J. & Hodgson, R. J. (1980). *Obsessions and compulsions*. Englewood Cliffs, NJ: Prentice-Hall.

<sup>9</sup> Davis, M., Eashelman, E. R. & MacKay, M. (1993). *The relaxation and stress reduction workbook*. USA: New Harbinger Publications, Inc.

<sup>10</sup> Foa, E. B. (1996). The efficacy of behavior therapy with obsessive compulsives. *The Clinical Psychologists*, 49, 19-22.

<sup>11</sup> Rimm, D. C. & Masters, J. C. (1974). *Behavior therapy: Techniques and empirical findings*. NY: Academic Press.

<sup>12</sup> Turner, S. M. & Beidel, D. C. (1988). *Treating obsessive compulsive disorder*. NY: Pergamon Press.

<sup>13</sup> Salkouskis, P. M. & Westbrook, D. (1989). Behavior therapy and obsessional ruminations: Can failure be turned into success? *Behavior Research and Therapy*, 27, 149-160.

Obsessions. Foa et al<sup>14</sup> attempted to construct a model to predict the success and failure in behavior treatment by examining the effects of three treatment components: Imaginal Exposure; In Vivo Exposure and Response Prevention (ERP) alone or in combination on diagnosed OCD clients (n=50) and found ERP highly effective (76% improvement which was maintained at follow ups as well). Joseph<sup>15</sup> findings also indicated more benefits of ERP alongwith pharmacological treatment with an average reduction of 35-40% in OCD symptoms which were maintained during long term than the pharmacological treatment alone. Headland and MacDonald<sup>16</sup> also found ERP effective while treating a 35 years old patient with 13 years history of Obsessional Rituals and Ruminations. Though considerable research has been documented in favor of Behavior therapy for the treatment of OCD with different combinations of techniques and variable number of sessions but most of the research work was done in the west. In this context, the present study was planned to see the efficacy of Behavior Therapy to treat OCD along with pharmacological treatment in comparison to pharmacological treatment alone. Therefore, it was hypothesized that clients who would receive Behavior Therapy along with pharmacological treatment will show more reduction in OCD and depressive symptoms than the clients who would receive pharmacological treatment alone.

## METHOD

### *Sample*

The present study followed an Experimental Design (AB) while adopting a pre-post intervention method. A sample comprised of twenty therapy naïve (never received any type of therapy) clients diagnosed with Obsessive Compulsive disorder, was recruited from indoor and outdoor units of Services Hospital; outdoor unit of Punjab Institute of Mental Health, Lahore and Center for Clinical Psychology, University of the Punjab, Lahore. The sample was

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<sup>14</sup> Foa, E. B., Grayson, J. B., Steketee, G. S., Doppelt, H. G., Turner, R. M., & Latimer, P. R. (1983). Success and failure in the behavioral treatment of obsessive compulsive. *Journal of Consulting and Clinical Psychology*, 51, 287-297.

<sup>15</sup> Joseph, D. G. (1993). Diagnosis and treatment of obsessive compulsive disorders. *Annual Review of Medicine*, 44, 53-61.

<sup>16</sup> Headland, K., & Macdonald, B. (1987). Rapid audiotape treatment of obsessional ruminations: A case report. *Behavior Psychotherapy*, 5, 188-192.

collected through purposive sampling with an age range from 18 to 55 years and duration of illness ranged from 1-4 years (although, they were having few symptoms but starting taking the treatment now). Ten clients (8 women & 2 men) were recruited in the treatment group (Mage= 35.87; SD=12.35) and 10 clients (4 women & 6 men) in control group (Mage= 38.92; SD= 15.76) randomly. All the clients in both treatment and control group were taking the Clomiperamine for the first time as of drug treatment, whereas, the clients in treatment group were taking the behavior therapy for the first time. Assessment was carried out at two points: pre and post therapy. Informed consent was obtained from the participants about their participation and they were assured about the confidentiality.

### ***Measures***

The diagnosis of OCD was established by adopting criteria of OCD using Diagnostic and Statistical Manual of Mental Disorders. The two scales: Depression and Anxiety of Symptom Checklist- Revised were used to assess intensity of Obsessive Compulsive Disorder and Depression. Baseline charts were constructed for 3 days to measure the duration and frequency for specific obsessions and compulsions by using the formula mentioned below:

Average frequency /day = Number of times act occurred / Number of days of baseline

Average duration/frequency = Total duration / Total frequency

Intensity was rated at 0-10 point scale by the client himself / herself

### ***Procedure***

#### **Therapeutic Program**

The program consisted of 10-12 sessions in total; with 10 sessions for therapeutic intervention and rest of the sessions were used for pre and post assessment. The duration of an individual session was of 45 minutes; structured as 25 minutes for practicing the Relaxation Exercise; 15 minutes to practice another technique and home work assignment was given in the remaining 5 minutes. The sessions were carried out twice a week over a period of 6 weeks. Assessment was done during the first and last week to see the efficacy of Behavior Therapy (BT). Therapy was carried out in 2 phases: Phase-I of

Behaviour Therapy comprised of training in Relaxation Techniques such as Jacobson's Progressive Muscle Relaxation and Imagery Exercises which remained for 10 sessions. The components of the phase-II started from third session included specific techniques related to OCD such as, Thought Stopping; Exposure with Response Prevention; Flooding and Satiation. The content of therapy sessions was kept flexible while taking into consideration of individual clients needs.

### *Statistical Analysis*

Independent samples t- test was employed to see whether there was any significant difference between the treatment and control group in terms of their reduction of OCD symptoms along depressive symptoms. Dependent samples test was employed to see any pre and post treatment assessment differences of the treatment and control groups.

## **RESULTS**

**Table 1**

**Independent samples t test of treatment and control group on Baseline Charts, Depression and OCD Scale of Symptom Checklist- Revised (OCD-SCL-R)**

Scales	Groups				
	Treatment ( <i>n</i> = 10)		Control ( <i>n</i> = 10)		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Baseline Charts	58.25	25.81	101.98	48.15	6.28*
OCD-SCL-R	8.60	6.34	16.40	3.57	2.96*
Dep-SCL-R	15.80	7.39	29.80	7.15	4.40*

Note: OCD = Obsessive Compulsive Disorder Scale; Dep= Depression Scale; \* = Significant at  $p < .05$ .

**Table 2**

**Dependent samples t test of pre and post assessment scores of treatment and control groups on Baseline Charts, Depression and OCD Scale of Symptom Checklist- Revised (OCD-SCL-R).**

Groups	Level	OCD-SCL-R			Dep-SCL-R			Baseline Charts		
		<i>M</i>	<i>SD</i>	<i>T</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Treatment Group	Pre	29.20	6.49		39.40	10.92		261.25	150.41	
	Post	8.60	3.57	12.50*	15.80	7.39	7.09*	58.25	25.81	3.49*
Control Group	Pre	26.60	5.54		39.80	5.06		235.32	71.88	
	Post	16.40	6.34	4.58*	29.80	7.15	5.50*	101.98	48.15	2.74*

## DISCUSSION

The results of the above mentioned case studies using Experimental design show that Behavior interventions along pharmacotherapy could be effective in reducing Obsession and Compulsions along with depressive symptoms as compared to control group who received pharmacotherapy alone.

Through analysis, it was revealed that significant improvement in individual cases was observed between pre and post assessment phases through the significant reduction in the obtained scores of Depression, OCD and baseline charts for both treatment and control group at both levels. It may be argued that clients were taking pharmacotherapy in both groups due to which there is a reduction in the scores, however, it is worth mentioning here that significantly higher reduction in the symptoms were noticed for the treatment group who received Behavior Therapy as well. The results are consistent with those of Joseph<sup>17</sup> who recommended Behavior Therapy for OCD Treatment along with pharmacological treatment than pharmacotherapy alone.

<sup>17</sup> Joseph, D. G. (1993). Diagnosis and treatment of obsessive compulsive disorders. *Annual Review of Medicine*, 44, 53-61.

Secondly, the treatment group also showed significant reduction in depressive symptoms comorbid with OCD as compared to control group. In light of the present results, it could be concluded that BT along with pharmacotherapy is very effective in reducing frequency, severity and duration of Obsessive Compulsive symptoms. Significant changes could be seen on baseline charts. There is empirical research evidence which<sup>18,19,20</sup> suggests that behavior therapy is very effective in the treatment of OCD and yields 60% to 70% improvement after brief treatment. The present results also proved the efficacy of following techniques: Exposure with Response Prevention, Satiation, Relaxation Exercises and Thought Stopping. The results are consistent with literature as 75-80% clients showed lasting and significant improvements with Exposure Response Prevention<sup>20</sup>.

The implications of the study suggest usefulness of treatment protocol for the clients with OCD along depressive symptoms. The findings also suggest that more intensive research efforts are needed in the area to validate long term effects. The limitations of the study include difficulty in generalizations of the results due to small sample size. Due to time constraints subjects were not matched across their particular obsessions or compulsions, age, gender, education and duration of illness. They were taken randomly and therapy was started to complete the sessions due to time constraints. Due to time constraints follow up sessions were could not be conducted thus long term effects of therapy could not to be studied. To overcome these limitation large numbers of sample is recommended, with more time to match subjects in terms of above mentioned variables and to conduct follow up sessions to establish long term efficacy of behavior therapy.

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<sup>18</sup> Foa, E. B.; Grayson, J. B., Steketee, G. S., Doppelt, H. G., Turner, R. M., & Latimer, P. R. (1983). Success and failure in the behavioral treatment of obsessive compulsive. *Journal of Consulting and Clinical Psychology*, 51, 287-297.

<sup>19</sup> Headland, K., & Macdonald, B. (1987). Rapid audiotape treatment of obsessional ruminations: A case report. *Behavior Psychotherapy*, 5, 188-192.

<sup>20</sup> Kucmaier, A.R., Walley, P. B., & Calhoun, K. S. (1987). Relaxation training, in vivo exposure and response prevention in the treatment of compulsive video game playing. *Scandinavian Journal of Behavior Therapy*, 16, 185-190.