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EFFICACY OF META-COGNITIVE THERAPY ON ADOLESCENT OBSESSIVE-COMPULSIVE DISORDER PATIENTS

Psychology

Dr. Deoshree Akhouri* PhD (Clinical Psychology) Assistant Professor & Clinical Psychologist, Department of Psychiatry, Jawaharlal Nehru Medical College & Hospital, Aligarh Muslim University, India-202002 *Corresponding Author

Dr. Subhas Soren Director, RINPAS cum Additional Professor, Department of Psychiatry, RINPAS, Kanke, Ranchi, Jharkhand, India-834009

Maria Madiha PhD Scholar (Clinical Psychology), Department of Psychiatry, Jawaharlal Nehru Medical College & Hospital, Aligarh Muslim University, India.

Dr. Ajay Kumar Bakhla M.B.B.S., M.D, DPM. Associate Professor of Psychiatry, Department of Psychiatry RIMS, Bariyatu, Ranchi, Jharkhand, India-834009

ABSTRACT

Introduction: Obsessive-compulsive disorder (OCD) is a mental condition that is distressing enough to affect about 1-2% of the population in the world. OCD have always been a constant concern for mental health professionals. Various treatment approaches have been undertaken for the management of OCD. The present study aims to see the effect of MCT as an add-on for the treatment of OCD among adolescents.

Objectives: To assess the severity of patients with obsessive compulsive disorder. To compare the effect of MCT (Group I) and ERP (Group II) and medication (as control group, Group III).

Method: 45 Patients were selected from Psychiatric OPD and randomly divided into 3 groups. Group I received MCT along with medication, Group II received ERP along with medication and Group III received only medication. Tools used in present study were: i) Self prepared socio-demographic and clinical data sheet, ii) Kutcher Depression Scale, iii) CY-BOCS and iv) Meta-Cognitive Assessment Scale.

Result: The result of present study indicates that MCT and ERP both are effective in reducing OCD symptoms further study also indicates that among MCT and ERP, MCT is more effective in reducing symptoms of OCD.

Conclusion: Findings suggest that MCT is an effective approach in the treatment of OCD

KEYWORDS

Meta-cognitive therapy; obsessive-compulsive disorder; adolescents; exposure-response prevention; medication

INTRODUCTION

Obsessive-compulsive disorder (OCD) is a psychological disorder characterized by the presence of repetitive, time-consuming obsessions and/or compulsions, which causes significant impairment in social, occupational and personal functioning affecting 1-2% of the population (American Psychiatric Association, 2013).

WHO reported that OCD is the 6th most disabling condition. It has been found to be highly comorbid with various psychiatric conditions, mostly with depression and other anxiety related disorders. The prevalence rate of OCD in children and adolescents is 0.5-1% to 4% (Wewetzer C, Jans T, Muller B, Neudorfl A, Bucherl U, et al., 2001). Little research has been conducted to show the prevalence rate of OCD in Indian population. A study conducted on large sample of school-going adolescents found that OCD is prevalent in about 0.8% of adolescent population.

Different non-pharmacological approaches have been undertaken for treating OCD. Diverse range of psychotherapies such as cognitive-behaviour therapy (CBT), mindfulness-based therapies (MBTs) has proven to be effective in improving the OCD conditions and so far exposure-response prevention (ERP) has proved its effectiveness. Along the years a new technique came into existence where the focus was to challenge patient's thoughts and suggest management strategies. This technique came to be known as meta-cognitive therapy (MCT).

MCT is a talking therapy where the focus is on helping patients realise their thinking pattern, how their thought processes take place, and how these thoughts leads to problematic conditions and providing the techniques to fight these thoughts. A study done by Akira Hasegawa (2013), MCT was found to be effective in discriminating the inappropriate thoughts from appropriate ones and reducing their frequency. A study conducted in 2012 explored the effectiveness of MCT for the treatment of OCD symptoms. The results of the study showed that MCT is effective in reducing obsessive – compulsive symptoms and in modifying meta-cognitive beliefs. The results obtained from several studies explained that change in meta-cognitive thoughts/ beliefs leads to variation in OCD symptoms which further affects recovery rate in patients

Unlike CBT where focus is on discussion of thoughts and examining them with regard to their reality, MCT focus on management of these thoughts [24]. A study conducted in 2006, compared MCT and ERP in children and adolescents, it was found that MCT proved to be a better alternative to ERP (Michael Simons, Silvia Schneider, Beate Herpertz-Dahlmann, 2006).

It is explained that about one-third to half of adults with OCD reported to have OCD symptoms in childhood (Geller DA, Biederman J, Faraone S, Agranat A, Cradock K, et al., 2001). This chronic course of OCD impairs social, occupational and personal lives of patients and in children it mostly affects their school lives. There is need for early diagnosis and treatment of OCD in childhood or at adolescent stage. The early diagnosis and treatment could help reduce the lifelong impairment caused by OCD (Preetika C, 2015). For this particular purpose, the present study has been undertaken. The present study focuses its attention on implementation of meta-cognitive therapy (MCT) for the non-pharmacological treatment of OCD and find out which among MCT and ERP is more effective in adolescents.

OBJECTIVES

1) To assess the severity of obsessive compulsive symptoms in patients
2) To assess and compare the effect of MCT, ERP and medication as interventions on the severity of OCD of all the groups (Group I, Group II and Group III)

METHODS AND MATERIALS

Sample: 45 patients meeting inclusion and exclusion criteria were taken up for the study from Psychiatric OPD.

Inclusion Criteria

1) Age range 13-17 years
2) Patients diagnosed with OCD according to DSM-V
3) Only patients with severe OCD
4) Patients with depression and anxiety
5) Both literate and illiterate
6) Both genders
7) Gave consent for participation
8) Having no severe medical or any other psychotic features

Exclusion Criteria

1) Not under age range
2) Not diagnosed with severe OCD, According to DSM-V
3) No anxiety and depression
4) Did not gave consent for participation
5) Having co-morbidity with OCD
6) Having any severe medical or any other psychotic features

Tools Used

1) Socio-Demographic and Clinical Data Sheet: It was used to collect clinical and personal information of all the patients. The data sheet included questions related to their age, marital status, occupation, residency, duration of illness, etc.

2) Hamilton Anxiety Rating Scale (HAM-A): is a 14 item scale rated on 5-points. Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56, where <17 indicates mild severity, 18–24 mild to moderate severity and 25–30 moderate to severe (Hamilton M, 1959).

3) Kutcher Adolescent Depression Scale (KADS-6): consists of 6 items rated on 4-point rating. Scores 0-5 are considered probably not depressed, 6 and above indicates possible depression.

4) Compulsions Checklist and Obsessions Checklist: It was used to determine the presence of OCD symptoms in adolescents.

5) Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS): It consists of 19 items but only items 1-10 are used. The total CY-BOCS score is the sum of items 1-10; the obsession and compulsion subtotals are the sums of items 1-5 and 6-10, respectively.

6) Meta-Cognitive Assessment Scale: It consists of 52 items, True and False form. The scale assesses knowledge about cognition (declarative, procedural and condition knowledge) and regulation of cognition (planning, information management strategies, comprehensive monitoring, debugging strategies and evaluation).

Procedure

Total 52 patients diagnosed with OCD from Psychiatric OPD, Jawaharlal Nehru Medical College and Hospital, Aligarh Muslim University were taken for psychosocial management. Those fulfilling the inclusion and exclusion criteria and gave consent for the study were selected. All the patients were explained about the purpose of the study and their written consent was attained. Socio-demographic and clinical details were taken-up after which presence and severity level of OCD was assessed using Compulsions Checklist and Obsessions Checklist and CY-BOCS respectively at baseline level. Meta-Cognitive level of all the patients was assessed using Meta-Cognition Assessment scale. Of these patients, those who were having severe form of OCD were taken up for the study. Total 45 patients fulfilled the inclusion and exclusion criteria and then they were randomly divided into 3 groups (Group I, Group II and Group III). All the groups consisted of 15 patients.

Group I was given MCT intervention with medication while Group II was given ERP intervention with medication. Group III was only given medication. Patients were asked to visit once a week for the session. Total 12 sessions were given. Patients were asked to visit in group of 5. Therapy continued for 3 months.

Table 1 and *Graph 1* showing the socio-demographic details of all the patients suffering from obsessive-compulsive disorder. Most of the patients were of age range 13-15, were boys, residing in urban areas and belonging from middle socio-economic background. Majority of the patients were attending secondary school and their duration of illness was more than 6 months.

RESULTS AND DISCUSSION:

The aim of the present study was to see the efficacy of MCT on adolescent OCD and make a comparison between MCT and ERP, to prove which one is more beneficial in OCD's non-pharmacological treatment. Along with this, present study also sees the effect of medication on the treatment of OCD and compares it with MCT and ERP as the mode of treatment for OCD. The obtained results of the present study indicate that MCT is an efficient approach for OCD adolescent patients as shown in *Table 2 & Graph 2*.

Patient's level of anxiety was high (M=30.06) pre-intervention but after the intervention of MCT, given for 12 sessions, improvement was found, i.e. anxiety reduced to M=7.06. Similarly, level of depression reduced from M=23.4 to M=10.26 as MCT as a pre-post intervention was given. This result indicates that MCT is an effective approach for the treatment of OCD in adolescent age group. Present finding supports previous study conducted by Colinvan der Heiden, Kimvan Rossen, Anika Dekker, Marianne Damstra and Mathijs Deen in 2016, where it was found that at post treatment and follow-up levels, MCT produced high proportions of clinically significant change on the Y-BOCS. The results of the study proved the effectiveness of MCT for OCD patients.

In the present study MCT was found that ERP also helps in reduction of anxiety from pre intervention (M=29.6 to post ERP intervention (M=16.2) in the OCD patients as well as decreased level of depression M=23.06 (pre intervention) to M=12.66 (post intervention) as it could be seen from *Table 3* & *Graph 3*. However, when the comparison was done between, both pre-post intervention, MCT and ERP it was found that MCT is more effective than ERP, which could also be seen from *Table 3, 5 & 6*, where *Cohen's d* is 7.12 (MCT with medication) and 4.94 (ERP with medication). The results of present study supports previous study done by Simons M, Schneider S and Herpertz-Dahlmann B in 2006 where comparison between MCT and ERP was taken-up for management and it was found that MCT is more promising psychotherapeutic approach in comparison to ERP.

In a 2010 study done by Hossein Shareh, Banafsheh Gharraee, Mohammad Kazem Atef-Vahid and Mehrdad Eftekhar where they compared 3 groups for the treatment of OCD found that MCT with fluvoxamine and psychotherapy (MCT alone) was more effective in the treatment as compared to fluvoxamine alone. Similar results were obtained in the present study. *Table 4, 5 & 6* shows the effect of MCT with medication and medication alone, indicative of MCT with medication was more effective than medication alone; *Cohen's d* is 7.12 for MCT with medication and 0.44 for medication.

These studies helps in concluding our findings and explaining that MCT is an efficient step towards providing patients with OCD a better treatment. Despite many indications, there's still a long way for mental health professionals to understand the importance of psychotherapy as the psychosocial management of OCD, especially MCT, is the first and foremost step towards making the world a better place for them.

CONCLUSION:

It could be concluded that MCT is an effective approach in the treatment of OCD.

Table 1 show Socio-Demographic and Clinical details

Variables	Characteristics	Group I (n=15, %)	Group II (n=15, %)	Group III (n=15, %)
Age	13-15	7 (47)	8 (53)	8 (53)
	15-17	8 (53)	7 (47)	7 (47)
Gender	Girls	5 (33)	4 (26)	5 (33)
	Boys	10 (67)	11 (74)	10 (67)
Education	High School	7 (47)	7 (47)	7 (47)
	Senior Secondary School	8 (53)	8 (53)	8 (53)
Religion	Hindu	4 (26)	4 (26)	5 (33)
	Muslim	11 (74)	10 (67)	10 (67)
	Others	0	1 (7)	0
Residence	Rural	7 (47)	7 (47)	7 (47)
	Urban	8 (53)	8 (53)	8 (53)
Socio-economic Status	High	3 (20)	3 (20)	3 (20)
	Middle	7 (47)	7 (47)	7 (47)
	Low	5 (33)	5 (33)	5 (33)
Duration of Illness	> 6 Months	10 (66)	11 (73)	9 (60)
	< 1 Year	5 (34)	4 (27)	6 (40)

***Table 2* shows the Effect of MCT with Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)**

Variables	Intervention	M	SD	t	sig.
OCD with Anxiety	Pre-MCT	30.06	3.76	23.93	0.000*
	Post-MCT	7.06	1.38		

OCD with Depression	Pre-MCT	23.4	1.8	23.47	0.000*
	Post-MCT	10.26	1.43		

*Significant at 0.05 level

***Graph 1* shows the Effect of MCT with Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)**

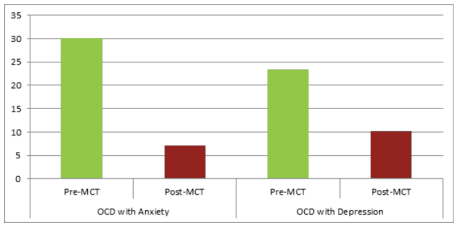

Table 3 shows the Effect of ERP with Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)

Variables	Intervention	M	SD	t	sig.
OCD with Anxiety	Pre-ERP	29.6	2.47	19.07	0.000*
	Post-ERP	16.2	1.42		
OCD with Depression	Pre-ERP	23.06	1.62	20.98	0.000*
	Post-ERP	12.66	1.23		

*Significant at 0.05 level

***Graph 2* shows the Effect of ERP with Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)**

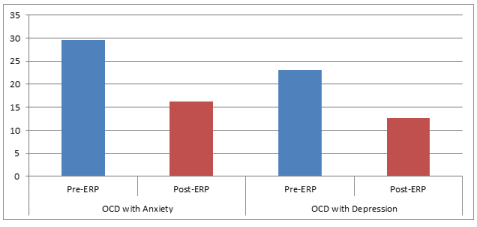

Table 4 shows the Effect of Only Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)

Variables	Intervention	M	SD	t	sig.
OCD with Anxiety	Pre-Medication	31.2	2.36	0.45	0.65
	Post-Medication	30.86	2.55		
OCD with Depression	Pre-Medication	23	1.69	3.66	0.003
	Post-Medication	22.13	1.4		

*Significant at 0.05 level

***Graph 3* shows the Effect of Only Medication on OCD with Anxiety and Depression (Pre-Post-Intervention)**

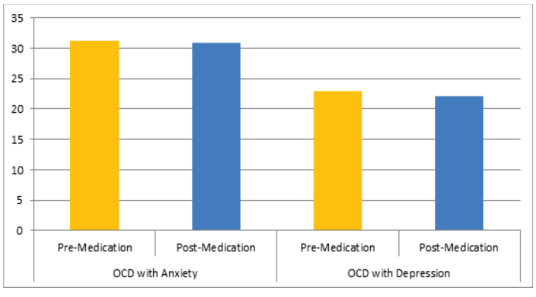

Table 5 shows Comparison of MCT, ERP and Medication on OCD Symptoms (Pre-Post-Intervention)

Intervention	M	SD	t	sig.
Pre-MCT	36.33	2.31		
Pre-ERP	35.4	2.89	0.97	0.33
Pre-Medication	35.53	2.69	0.13	0.89
Post-MCT	13.4	2.35	3.5	0.000*
Post-ERP	16.6	2.64	19.8	0.000*
Post-Medication	35.26	2.52		

*Significant at 0.05 level

***Graph 4* shows Comparison of MCT, ERP and Medication on OCD Symptoms (Pre-Post-Intervention)**

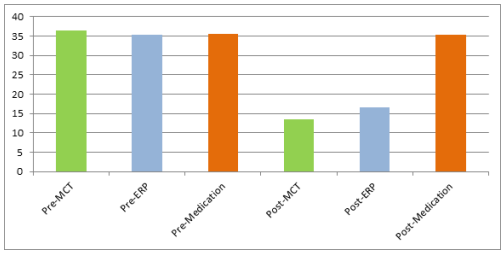

Table 6 shows the comparison between MCT with Medication, ERP with Medication and Medication on OCD (Pre-Post-Intervention)

Technique	Intervention	M	SD	t	sig.	Effect Size en's d)
MCT with Medication	Pre-Intervention	36.33	2.31	27.6	0.000*	7.128
	Post-Intervention	13.4	2.35			
ERP with Medication	Pre-Intervention	35.4	2.89	19.15	0.000*	4.944
	Post-Intervention	16.6	2.64			
Medication	Pre-Intervention	35.53	2.69	1.74	0.104	0.449
	Post-Intervention	35.26	2.52			

*Significant at 0.05 level

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