

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

Panchal. M^{1*}, Singh. R², Gamit. H³

ABSTRACT

Clinical depression is one of the most common and debilitating of the psychiatric disorders. The individual usually suffers from depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatigability and diminished activity. Marked tiredness after only slight effort is common. The aim of the present study is to examine the effectiveness of Cognitive Behaviour therapy on patient suffering from depression. Total sample size was 16 patients diagnosed with depression according to ICD-10. Two groups were formed, 8 in control group and 8 in experimental group respectively. Cognitive Behaviour Therapy was given to experiment group only. The results show that a significant difference was found between the experimental and control group.

Keywords: *Depression, Cognitive Behaviour Therapy*

Clinical depression is one of the most common and debilitating of the psychiatric disorders. Lifetime prevalence has been estimated at 16.2% and rates of comorbidity and risk for suicide are high. Up to one-third of all patients will have episodes that last longer than two years, and over three-quarters of all patients who recover from one episode will go on to have at least one more. Although there are efficacious treatments for depression, many patients do not receive adequate treatment, and still more are refractory to available interventions.

LITERATURE REVIEW

Many researchers have been carried out supporting the effectiveness of Cognitive Behaviour Therapy in depressive patients. One of such study was done by Embling in 2002 to throw light on the process and outcome of the use of CBT to treat depression. This study was undertaken at an acute psychiatric assessment centre based in the community. The total sample of 38 clients were

¹ Former Clinical Psychologist, Institute of Research & Development, Raksha Shakti University, Ahmedabad, India

² Lecturer, Institute of Behaviour Science, Gujarat Forensic Sciences University, Gandhinagar, India

³ Ph.D Research Scholar, Sardar Patel University, Anand, India

*Responding Author

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

allocated to either a treatment group (n = 19) or waiting list control group (n = 19) matching for age, gender and social support. Result showed that CBT is an effective treatment for depression.

David in 2012 aimed to see the effect of cognitive behaviour therapy on primary care patients with depression. In this study providing CBT over the telephone compared with face-to-face resulted in lower attrition and close to equivalent improvement in depression at post-treatment. At 6-month follow-up, patients remained less depressed relative to baseline; however, those receiving face-to-face CBT were less depressed than those receiving T-CBT. Results indicate that T-CBT improves adherence compared with face-to-face delivery, but at the cost of some increased risk of poorer maintenance of gains after treatment cessation.

A study by Juned Siddique in 2012 aimed to compare the medication versus cognitive behavior therapy among depressed women with moderate baseline depression and anxiety. In this study medication was apply superior to CBT at 6 months, but the difference was not sustained at 1 year. Results showed that the among women with severe depression, there was no significant treatment group difference at 6 months, but CBT was superior to medication at 1 year.

METHODOLOGY

Aims:

The aim of the present study is to examine the effectiveness of Cognitive Behaviour Therapy on patient suffering from Depression.

Hypotheses:

H0: There will be no significant difference between Experimental and Control Group.

Study Design:

- Pre-Post Test Design.

Sample:

Total sample size was 16 patients diagnosed with depression according to ICD-10. Samples were purposively selected from Hospital for Mental Health, Ahmedabad. Two groups were formed, 8 in control group and 8 in experimental group respectively. Cognitive Behaviour Therapy was given to experiment group only.

Inclusion criteria:

- a. Age range between 20 to 50 years
- b. Diagnosed as Depression according to ICD-10
- c. Patient willing to participate

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

Exclusion criteria:

- a. Any other psychiatric disorders
- b. Mental retardation
- c. Brain injury or any CNS insult
- d. Past history of Alcohol and drug dependency prior to diagnose of depressive patient.
- e. Patients not cooperating for the study

Test Administered:

- a) Socio demographic data sheet
- b) Beck depression Inventory

a) Socio Demographic Data Sheet

It consisted of information about the Socio-Demographic variables like age, sex, education, marital status, religion, socioeconomic status and domicile of the subjects.

b) Beck Depression Inventory

Beck Depression Inventory was used to assess the subject's intensity of Depression.

Procedure

Socio-demographic details were gathered from all 16 patients meeting the inclusion criteria. Beck Depression Inventory was administered to assess the severity of depression. Two groups (Control group and experimental group) of 8 patients each was formed randomly.

Control group received only pharmacological treatment while experimental group was given Cognitive behaviour therapy as a psychological intervention along with pharmacological treatment.

RESULT

Table: 1 showing the socio demographic details of patients of Depression for experimental and control group.

Variable		Frequency (%)	M	SD
Age	20-30	4 (25.0)	1.37	.89
	30-40	2 (12.5)		
	40-50	10 (62.5)		
Sex	Male	7 (43.8)	.56	.75
	Female	9 (56.3)		
Order Of Birth	First	7 (43.8)	.75	.77
	Middle	6 (37.5)		
	Last	3 (18.8)		

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

Variable		Frequency (%)	M	SD
Education	Illiterate	5 (31.3)	1.69	1.35
	Up to five	1 (6.3)		
	Six to ten	5 (31.3)		
	Graduation	4 (25.0)		
	Post-Graduation	1 (6.3)		
Occupation	Unemployed	9 (56.3)	.62	.88
	Private Job	5 (31.3)		
	Govt. Job	1 (6.3)		
	Business	1 (6.3)		
Marital Status	Married	13 (81.3)	.25	.58
	Single	2 (12.5)		
	Divorce	1 (6.3)		
Domicile	Urban	15 (93.8)	.06	.25
	Rural	1 (6.3)		
SES	Lower	5 (31.3)	.69	.48
	Middle	11 (68.8)		
Family Type	Nuclear	11 (68.8)	.31	.48
	Joint	5 (31.3)		
Duration Of Illness	0 to 5	13 (68.0)	3.09	3.01
	6 to 10	3 (18.0)		
Physical Illness	Present	0 (0)	1.00	.001
	Absent	16 (100.0)		
Treatment	On Drug	12 (75.0)	.25	.45
	Drug naïve	4 (25.0)		
Family H/O of mental illness	Present	5 (31.3)	.69	.48
	Absent	11 (68.8)		
No .Of Episode	1-3	13 (80.0)	2.25	1.29
	3-5	3 (20.0)		
Age of onset	20 to 30	7 (42.0)	34.00	10.22
	30 to 40	2 (12.6)		
	40 to 50	7 (54.0)		
Depression level	Moderate	3 (18.8)	2.81	.40
	Severe	13 (81.3)		

Table 1 shows the socio-demographic details of both the groups. 62% of the patients fell in the age range of 40-50, 25% in the age range of 20-40 and 12% fell in the age range of 30-40

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

respectively. 43.8% were male and 56.3% were female. 31% were illiterate patients, 31% studied up to 10th standard and 25% studied up to graduation. 56% were unemployed, 31% were doing private job. 81% were married, 12% were single and 6% were divorcee. 93% were from urban area and 6.3 were from rural area. 31% from the lower class and 68% were from the middle class. 68% were from nuclear family and 31% were from the joint family. 68% fell in the range of duration of illness of 0-5 and 18% fell in 6-10. 75% were on drug and 25% were drug naïve. 68% were having family history of mental illness.

Table:2, Mann-Whitney U test value for Age, Sex, and Education for both Experimental and Control Group.

Variable	Mann Whitney u test	Z	P value
Age	23.00	-1.09	.27
Sex	28.00	-.48	.63
Education	19.50	-1.36	.17

Table No 2 indicates Z value for both group experiment and control group for age, sex and education. Table shows that z value for age is -1.09, for sex is -.48, and for education is -1.36. There is no significant difference in age, sex and education of the subjects of both groups.

Table: 3 Mann Whitney U test for Pre & Post assessment experimental and control group

	GROUP	N	Mann Whitney U test	Mean Rank	Z-value	P-Value
Pre Test	EXPERIMENTAL	8	28.00	8.00	-.62	.53
	CONTROL	8		9.00		
Post Test	EXPERIMENTAL	8	15.00	6.38	-1.90	.05*
	CONTROL	8		10.63		

*Significant at the 0.05 level (2-tailed)

Table: 3 show the Mann Whitney u test value for the experimental and control group at pre- test level and post-test level. Result shows that in pre-test, there is difference between experimental and control group. Mean ranks for experimental and control group at pre-Test level are 08 and 09 respectively. Z value for the pre-Test found .62 and its corresponding p value is .53, which is not significant.

Result shows that in post-test, there is difference between experimental and control group. Mean ranks for experimental and control group at post-test level are 6.38 and 10.63 respectively. Z value for the post -Test found 1.90 and its corresponding p value is .05 which is significant.

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

Table 4: Wilcoxon Signed Rank Test value in Experimental and Control Group.

Variable	N	Mean Rank	Z value	P value
control group	16	3.50	-2.27	.02*
experimental group	16	4.50	-2.56	.01**

*Significant at the 0.05 level (2-tailed), ** Significant at the 0.01 level (2-tailed),

Table 4 shows Wilcoxon Signed Rank Test for Pre & Post Experimental and Control Group. Results indicate that for the control group, the mean rank found for pre and post assessment is 3.5 and its corresponding Z value is 2.27 and p value is 0.02, which is significant at the 0.05 level. Furthermore, results indicate that for the experimental group, the mean rank found for pre and post assessment is 4.5 and its corresponding Z value is 2.56 and p value is 0.01, which is significant at the 0.01 level.

DISCUSSION

In the current study, the total number of samples was 16. Out of this, 8 were selected for the experimental group and 8 for the control group. The samples were selected from the Hospital for Mental Health. The aim of the present study was to assess the effectiveness of Cognitive Behaviour Therapy on patients suffering from depression. The tool used for the present study to assess depression was the Beck Depression Inventory-II.

In the current study, the majority of the patients (56.3%) were females, 68% of patients from the nuclear family, 93% of patients residing in urban areas and 31% of patients from the lower class. This finding is supported by a study that depression is more common in women, in subjects from a poor economic background, those residing in nuclear families and urban areas (Somasundaram et al., 1981). A similar study conducted by Pongothai et al. in 2009 showed a higher prevalence of depression among the urban population (Table 1).

No significant difference was found between the groups regarding age, sex, and education (Table 2). It is in congruence with the fact that both groups were matched with respect to age, sex, and education. The mean age of the depression patient in both groups was 1.37 years.

The experimental group was found to differ significantly from the control group on post-test after the intervention of Cognitive Behaviour Therapy. This result is supported by the earlier study conducted by Ashouri et al. in 2013. This study aimed to see the effectiveness of meta-cognitive therapy (MCT) and cognitive-behavioural therapy (CBT) in patients with major depressive disorder. They found MCT and CBT were more effective than pharmacotherapy alone in the treatment of MDD (Table 3).

Results showed that there was a significant difference between the experimental and control group after the intervention. This finding collaborated with the study conducted by Siddique in 2012, which aimed to compare medication versus cognitive behaviour therapy among depressed

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

women with moderate baseline depression and anxiety. In this study medication was apply superior to CBT at 6 months, but the difference was not sustained at 1 year. Results showed that the among women with severe depression, there was no significant treatment group difference at 6 months, but CBT was superior to medication at 1 year (Table 4).

CONCLUSION

The results show that a significant difference was found between the experimental and control group. Hence, it can be concluded that cognitive behaviour therapy is effective in patients suffering from depression.

LIMITATION

- Sample size taken was small.
- Other psychiatric conditions were not addressed.

FUTURE DIRECTION

- Sample Size should be large and from different places sample should be taken.
- The therapy can also be applied on different psychiatric condition with different psychological variable.
- Intervention time period can be extended.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests

The author declared no conflict of interests.

REFERENCES

- Ashouri. A, Atef. M. K, Gharaee. B, Rasoulilian. M, (2013). "Effectiveness of meta-cognitive and cognitive behavioral therapy in patients with major depressive disorder". Iran J Psychiatry Behav. Sci.7(2):24-34.
- Embling. S, (2002). "The effectiveness of cognitive behavioural therapy in depression", Nurs Stand. 2002 Dec 18-31; 17(14-15): 33-41.
- Grover. S, Dutt. A, and Ayasthi. A, (2010). "An overview of Indian research in depression". Indian J Psychiatry. 52(Suppl1): S178-S188.
- Mohr. D. C, Ho. J, Duffecy. J, Reifler. D, Sokol. L, Burns. M. N, Siddique. J, (2012). "Effect of Telephone-Administered vs Face-to-face Cognitive Behavioral Therapy on Adherence to Therapy and Depression; Outcomes Among Primary Care Patients". JAMA, Vol 307, No.21.
- Poongothai. S, Pradeepa. R, Ganesan. A, Mohan. V, (2009). "Prevalence of Depression in a Large Urban South Indian Population". DOI: 10.1371/journal.pone.0007185.

Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression

- Ramachandran V, Menon MS, Arunagiri S, (1982). "Socio-cultural factors in late onset depression". *Indian J Psychiatry*. 24:268–73.
- Reddy. M. V, Chandrashekhar. C. R, (1998). "Prevalence of mental and behavioural disorders in India": A metaanalysis. *Indian J Psychiatry*. 1998; 40:149–57.
- Sadock. B. J, Sadock. V. A. "Synopsis of Psychiatry". Pg.No.528-534.
- Siddique. J, Chung. J. Y, Brown. C. H, Miranda. J, (2012). "Comparative Effectiveness of Medication versus Cognitive-Behavioural Therapy in a Randomized Controlled Trial of Low-Income Young Minority". *Journal of Consulting and Clinical Psychology*. Vol.80, No. 6, 995-1006.

How to cite this article: M Panchal, R Singh, H Gamit (2016), Effectiveness of Cognitive Behaviour Therapy on Patients Suffering From Depression, *International Journal of Indian Psychology*, Volume 3, Issue 4, No. 64, ISSN 2348-5396 (e), ISSN: 2349-3429 (p), DIP:18.01.119/20160304, ISBN: 978-1-365-32519-9