

# Hospital Based Study of Depression among OCD Patients

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## ABSTRACT

**Introduction:** Obsessive Compulsive Disorder is a frequent psychiatric disorder usually accompanied with other psychiatric disorders during the course of illness. Depression has been reported as one of very common comorbid psychiatric disorder and this co morbidity in OCD has been associated with poor quality of life and poor prognosis. This study aimed to evaluate socio demographic variables and depression severity among OCD patients comorbid with depression.

**Material and Methods:** Obsessive Compulsive Disorder was diagnosed as per DSM IV TR criteria. Clinical phenomenology and severity were assessed using Yale Brown Obsessive Compulsive Check list and Scale respectively. Depression severity was done using Hamilton Rating Scale for Depression. Data analysis was done with the help of SPSS, version 20. A total of 200 consecutive OCD patients were taken for the study after fulfilling the inclusion criteria.

**Result:** Females were more likely to suffer from depression as compared to males ( 27.38% Vs 31.03%). Depression was more prevalent among females as compared to males. Housewives and unemployed people were more likely to suffer from depression in comparison to other occupations. 29.5% were depressed as per scores on HAM D scale. OCD was more severe in patients with comorbid depression than those without comorbid depression. Obsessions were mostly of Contamination type (71.18%) while as cleaning was the commonest compulsion (72.88%).

**Conclusion:** Depression in OCD is frequently common which clinician needs to be aware of while managing patients having comorbid depression.

**Keywords:** Depression, Obsessive Compulsive Disorder

## INTRODUCTION

Obsessive-compulsive disorder (OCD) is an intriguing and disabling illness characterized by the presence of unwanted thoughts, images or impulses known as obsessions and/or repetitive actions called compulsions.<sup>1</sup> National Epidemiological Catchment Area (ECA) survey revealed that OCD is the fourth most common psychiatric disorder.<sup>2</sup> A startling two percent of the world's population suffers from OCD. The percentage in India is smaller (about 0.6%). But even this would translate into substantial numbers considering our population.<sup>3</sup> Patients with OCD suffer significant personal and social morbidity and may have difficulty in maintaining a job, finishing school and developing relationships.<sup>4</sup> In addition, a majority of patients with OCD are at high risk of having one or more comorbid (co-existing) psychiatric illness. Depression and anxiety disorders and are the common comorbid conditions reported in most studies of OCD.<sup>5-8</sup> In the Epidemiological Catchment Area (ECA) study, two thirds of those with OCD had a comorbid psychiatric illness.<sup>2</sup> Recent epidemiological and clinical studies have also confirmed the presence of a strong association between OCD and affective disorders.<sup>9,10</sup> Denys et al found that Major Depressive Disorder (MDD) was 10 times

more prevalent in OCD patients than in general population.<sup>11</sup> Comorbid depression in OCD predicts poor treatment response to psychological treatments and higher OCD severity.<sup>12-14</sup> Keeping these observations under consideration, we decided to embark on this study so as to assess depression severity among OCD patients.

## MATERIAL AND METHODS

This study was a non-interventional cross sectional observational study which was carried amongst patients attending OCD clinic of Government Psychiatric Diseases Hospital Srinagar, an associated hospital of Government Medical College. Data of every patient was recorded in the semi structured case sheet especially designed for this study. 200 consecutive newly registered patients above 18 years of age and consenting for the study were taken up for this purpose. Those with organic brain/medical disorders, endocrinopathies and severe medical problems were excluded.

### Instruments

Diagnosis of OCD was made as per DSM IV TR criteria while as clinical symptomatology and severity of OCD was assessed by Yale brown obsessive compulsive Scale (Y-BOCS).<sup>15,16</sup> Diagnostic and statistical manual of mental disorders (DSM) is the psychiatric classification developed by American Psychiatric Association in collaboration with other groups of mental health professions.<sup>15</sup> YBOCS provides specific measure of severity of symptoms of obsessive compulsive disorder that is not influenced by the type of obsession or compulsion present. The scale is 10 item clinician rated, each item rated from 0 (no symptoms) to 4 (extreme symptoms) with a total range of 0 to 40.<sup>16</sup> Severity of depression was assessed using Hamilton Rating Scale for Depression (HAM D), those with scores of at least 8 were recorded positively for Depression.<sup>17</sup>

## STATISTICAL ANALYSIS

Data about various parameters was categorized according to sociodemographic factors, OCD and depression severity etc. The information thus generated was presented in tables. Appropriate statistical tests like t test and Chi square test were applied and statistical significance was set at  $p < 0.05$ . Statistical analysis was carried out with a commercial software package (SPSS, version 20).

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Characteristics	Variables	Frequency (%)	OCD without MDD (%)	OCD with MDD (%)	P (Chi square test)
Age ( in years)	19-28	88 (44.0)	69 (78.40)	19 (21.59)	0.08
	29-38	70 (35.0)	48 (68.57)	22 (31.42)	
	39-48	31 (15.5)	17 (54.83)	14 (45.16)	
	>48	11 (5.5)	7 (63.63)	4 (36.36)	
Sex	Male	84 (42.0)	61 (72.61)	23 (27.38)	0.57
	Female	116 (58.0)	80 (68.96)	36 (31.03)	
Marital status	Married	127 (63.5)	89 (70.07)	38 (29.99)	0.43
	Unmarried	59 (29.5)	44 (74.57)	15 (25.42)	
	Others	14 (7.0)	8 (57.14)	6 (42.85)	
Education	Illiterate	27 (13.5)	14 (51.85)	13 (48.14)	0.08
	Middle	32 (16.0)	21 (68.75)	11 (34.37)	
	Up to Graduate	101(51.5)	77 (76.23)	24 (23.30)	
	Post Graduate	40 (20.0)	29 (72.50)	11 (27.50)	
Occupation	Unemployed	23 (11.5)	10 (43.47)	13 (56.52)	0.0007
	Employee	68 (34.0)	56 (82.35)	12 (17.64)	
	Students	55 (27.5)	45 (81.81)	10 (18.18)	
	Housewife	54 (27.0)	30 (55.55)	24 (44.44)	

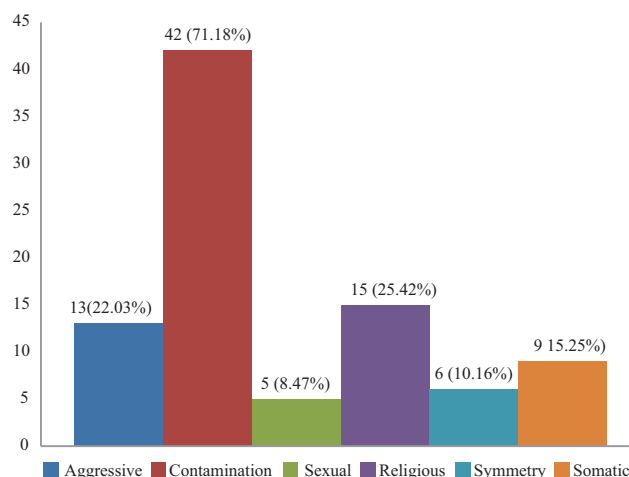
**Table-1:** Socio demographic profile of patients

HAM D score	Severity	Number of patients	Percentage
0-7	Normal (Non depressed )	141	70.5
8-13	Mild	12	6.0
14-18	Moderate	38	19.0
19-22	Severe	6	3.0
≥23	Very severe	3	1.5

**Table-2:** Depression severity of patients

Variable	OCD without depression (SD)	OCD with depression (SD)	P (t test)
Obsession	10.2 (3.4)	11.4 (5.0)	0.05
Compulsion	12.2 (2.8)	12.9 (3.9)	0.13
Total	22.2 (6.2)	24.3 (7.2)	0.04

**Table-3:** Mean YBOCS score of patients with and without depression



**Figure-1:** Phenomenology of Obsessions among co morbid depressive patients

**RESULTS**

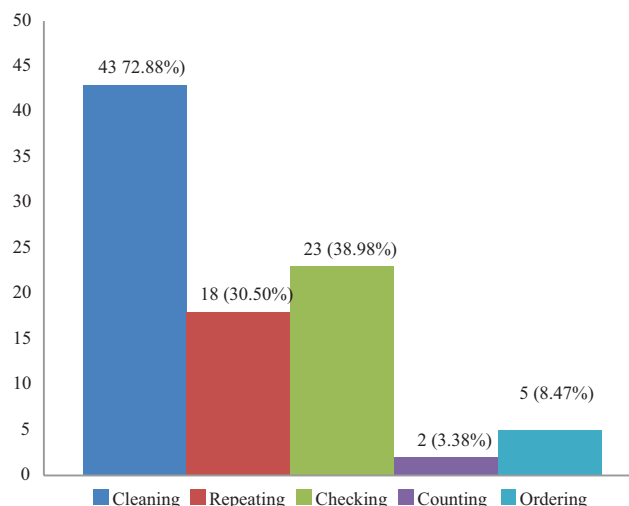
Most of the patients belonged to age group 19-28 years (44%) whereas depression was more prevalent in age group in age group 39-48 years (45.15%). Females were more likely to suffer from depression as compared to males ( 27.38% Vs 31.03%). Depression was more prevalent among housewives and unemployed people (Table 1).

29.5% were depressed as per scores on HAM D scale. 19% patients belonged to Moderate degree of Depression as per scores on HAM D scale with only 1.5% patients belonging to very severe degree of depression (Table 2).

OCD severity assessed by YBOCS was higher in patients with comorbid depression than those without comorbid depression. Difference was statistically significant in case of total YBOCS score (22.2 Vs 24.3, *P* = 0.04) (Table 3). Obsessions were mostly of Contamination type (71.18%) followed by religious obsessions (25.42%). Sexual obsessions were least common type (8.47%) Compulsions were predominantly of cleaning (72.88%) type and least common obsessions were obsessions of counting (3.38%) (figure- 1 and 2).

**DISCUSSION**

The association between OCD and depression has been



**Figure-2:** Phenomenology of compulsions among co morbid depressive patients

acknowledged since the nineteenth century.<sup>18</sup> Researchers have repeatedly found that when compared to non-depressed OCD patients, depressed OCD patients have higher functional impairment and poorer quality of life.<sup>19,20</sup>

While depression accompanied one-third of OCD patients in the first examination, two-thirds have a lifetime history of depression.<sup>21,22</sup> Most studies agree that at least one-third of patients with OCD have concurrent MDD at the time of evaluation which is in accordance with our study finding 29.5% (59) patients having comorbid MDD at the time of evaluation.<sup>21,23</sup> Rasmussen and Eisen found 31% primary OCD suffering from MDD at the time of evaluation hence in accordance with our results.<sup>8</sup> Methodological and semantic differences account for wide prevalence of MDD in OCD and prevalence ranges from 19-90.<sup>14</sup>

In the present study, the sex ratio was tilted towards the female gender with 58%(116) females and 42%(84) males comprising whole of the sample. Mean age of patients was 29.6 years. This is in agreement with Khanna et al who reported 29.5 years as mean age.<sup>7</sup> The majority of the patients belonged to young and the middle age groups. These results are in agreement with recent studies which have found younger patients dominating the percentage of patients presenting with OCD.<sup>5-8</sup> Married people were dominating our sample as 63.5%(127) patients were married and 29.5%(59) were unmarried. Khurana et al reports 70% patients married, and 30% unmarried thus bearing greater resemblance to our results.<sup>5</sup> Graduates comprised about 50.5% (101) while as 20% (40) were post graduates. No significant differences were found for gender, age, marital status, education but there were statistically significant differences regarding occupation as depression was more common among housewives and unemployed people. 31.03% (36) females and 27.38% (23) males had depression though the difference was not statistically significant. Depression was also found more commonly in the age group of 39-48 years while as least among 19-28 years age group. 48.14% Illiterate patients had depression in comparison to 27.5% post graduates having depression.

Patients were assessed on Hamilton Depression Rating Scale which has proven useful for many years as way of determining patient's level of depression. Among patients who were diagnosed as depression, 19% (38) patients had moderate level of depression while as 4.5% (9) patients had at least severe depression. 70.5% patients were free of depression at the time of assessment.

Patients who had comorbid depression had higher scores on YBOCS scale as compared to those without comorbid depression and this difference was statistically significant. Yap et al also found similar results but the difference was not statistically significant like our study.<sup>24</sup>

OCD is a heterogenous disorder with broad range of obsessions and compulsions. People of a particular area and religion share similar concerns which are reflected in the kind of obsession that area and people have. Cross cultural differences and religious factors play a big role in presentation of symptomatology of OCD.<sup>25,26</sup> Obsessions of contamination and cleaning compulsions was the most common clinical presentation among patients suffering from comorbid depression.

**Conclusion:** Comorbid depression in OCD needs to be kept in mind for improving treatment outcomes for OCD. Depression in OCD occurs in a good number of patients and it is not just depressive symptoms but moderate severity of depression which is found commonly in these patients.

## REFERENCES

1. Khanna S, Kaliaperumal VG, Channabasavanna SM. Clusters of obsessive-compulsive phenomena in obsessive-compulsive disorder. *Br J Psychiatry*. 1990;156:51-4.
2. Karno M, Golding JM, Sorenson SB, Burnam MA. The epidemiology of obsessive compulsive disorder in five US communities. *Arch Gen Psychiatry*. 1988;45:1094-1099.
3. Avasthi A, Kumar D. Phenomenology of Obsessive Compulsive Disorder. *JK Science*. 2004;6(1).
4. Murray CJ, Lopez AD. The Global Burden of Disease: a comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020. Cambridge, MA; Harvard School of Public Health, (Global Burden of Disease and Injury Series) 1996;1.
5. Khurana S, Bhargav SC, Kumar K, Purushottam, Gupta R. A clinical study of multi-dimensional model of Obsessive Compulsive Disorder (OCD). *Integrated Journal of Social Sciences*. 2014;1:5-10.
6. Parmar MC and Shah NP. Phenomenology of Obsessive Compulsive Disorder. *International Journal of Pharmaceutical and Medical Research*. 2014;2(2).
7. Khanna S, Rajendra PN, Channabasavanna SM. Sociodemographic variable in obsessive-compulsive neurosis in India. *The International Journal of Social Psychiatry*. 1987;32:47-54.
8. Rasmussen SA, Eisen JL. Epidemiological and clinical features of obsessive compulsive disorder. *Child and Adolescent Psychiatric Clinics of North America*. 1992;15:744-58.
9. Kruger S, Cooke RG, Hasey GM, Jorna T, Persad E. Comorbidity of obsessive-compulsive disorder in bipolar disorder. *Journal of Affective Disorders*. 1995;34:117-120.
10. McElroy SL, Altshuler L, Suppes T, Keck PE Jr, Frye MA, Denicoff KD, Nolen WA, Kupka RW, Leverich GS, Rochussen JR, Rush AJ, Post RM. Axis I psychiatric comorbidity and its relationship with historical illness variables in 288 patients with bipolar disorder. *American Journal of Psychiatry*. 2001;158:420-426.
11. Denys D et al. Axis I and II comorbidity in a large sample of patients with obsessive-compulsive disorder. *Journal of Affective Disorders*. 2004;80:155-162.
12. Abramowitz JS et al. Effects of comorbid depression on response to treatment for obsessive-compulsive disorder. *Behavior Therapy*. 2000;31:517-528.
13. Gava I et al. Psychological treatments versus treatment as usual for obsessive compulsive disorder (OCD). *Cochrane Database of Systematic Reviews*. 2007;2:18.
14. Overbeek T, Schruers K, Vermetten E, Griez E. Comorbidity of obsessive-compulsive disorder and depression: prevalence, symptom severity, and treatment effect. *The Journal of Clinical Psychiatry*. 2002;63:1106-1112.
15. American Psychiatric Association and American Psychiatric Association Task Force on DSM-IV. *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR*. Washington DC, USA: American Psychiatric Association; 2000.
16. Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischmann RL, Hill CL, Heninger GR, Charney DS. The Yale-Brown Obsessive Compulsive Scale. I. Development, use, and reliability. *Arch Gen Psychiatry*. 1989;46:1006-11.
17. Hamilton M. A rating scale for depression. *Journal of Neurology, Neurosurgery and Psychiatry*. 1960;23:56-62.
18. McIntyre RS, Soczynska, Bottas A, Bordbar K, Konarski JZ, Kennedy SH. Anxiety disorders and bipolar disorder: a

- review. *Bipolar Disorders*. 2006;8:665–676.
19. Eisen J et al. Impact of obsessive-compulsive disorder on quality of life. *Comprehensive Psychiatry*. 2006;47:270–275.
  20. Masellis M, Rector NA and Richter MA. Quality of life in OCD: differential impact of obsessions, compulsions, and depression comorbidity. *Canadian Journal of Psychiatry*. 2003;48:72–77.
  21. Tukul R, Polat A, Ozdemir O, Aksut D, Turksoy N. Co morbid conditions in obsessive-compulsive disorder. *Compr Psychiatry*. 2002;43:204-209.
  22. Eisen JL, Goodman WK, Keller MB, Warshaw MG, DeMarco LM, Luce DD, Rasmussen SA. Patterns of remission and relapse in obsessive-compulsive disorder: a 2-year prospective study. *J Clin Psychiatry*. 1999;60:346-351.
  23. Perugi G, Akiskal HS Pfanner C, Presta S, Gemignani A, Milanfranchi A, Lensi P, Ravagli S, Cassano GB. The clinical impact of bipolar and unipolar affective comorbidity on obsessive- compulsive disorder. *Journal of Affective Disorders*. 1997;46:15–23.
  24. Yap K, Mogan C, Kyrios M. Obsessive-compulsive disorder and comorbid depression: The role of OCD related and non-specific factors. *J Anxiety Disord*. 2012;26:565-573.
  25. Bhogra D and Bhui K. *Textbook of Cultural Psychiatry*. New York. Cambridge University Press; 2007.
  26. Manjunath Rajashekharaiyah, Pravin Verma. Phenomenology of obsessions and compulsions in Indian patients. *International Journal of Contemporary Medical Research*. 2016;3:2139-2143.

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