**Open Access Journal** 

CrossMark

# Psychiatric Comorbidity in Patients of OCD: How Severe is Anxiety and Depression?

Dr. Navdeep Kaur<sup>1</sup>, Dr. P. D Garg<sup>2</sup>, Dr. Rajiv Arora<sup>\*3</sup>

\*Corresponding Author - Dr. Rajiv Arora

#### Abstract

**Introduction** - OCD is a debilitating illness characterized by obsessions and compulsions. It affects 1-3% of population. Many psychiatric illnesses are common with it. Anxiety and depression are commonest disorders. **AIM** - To study severity of OCD, to study severity of anxiety and depression and other psychiatric comorbidity. **Method** - A cross-sectional study of 45 patients conducted in department of Psychiatry, GMC, Amritsar. Diagnosis was confirmed using ICD-10criteria.M.I.N.I, HAM-A,HAM-D,Y-BOCS were used to assess comorbidity, severity of OCD, depression and anxiety. **Results** - Majority of patients suffering from OCD had a chronic course with adolescent onset with male predominance and most of them had comorbid psychiatric disorder, commonest being MDD, anxiety disorders, substance abuse, BPAD etc .Relationship of YBOCS with HAM-D came out to be highly significant p-value <0.001, relationship of YBOCS with HAM-A was not significant p-value=0.202.

Keywords: OCD, Anxiety disorders, Depression, MDD, BPAD.

#### Background

Obsessive compulsive disorder is a common psychiatric disorder that is characterized by chronic and debilitating symptoms of obsession and compulsion and/ or compulsions. Obsessions are described as intrusive repetitive persistent thoughts urges or images that are distressing, compulsions are excessive and repetitive ritualistic behaviors or mental acts that cannot be resisted and or perhaps performed to reduce anxiety caused by obsession. These are often ego dystonic. It affects 1-3% percent of a population. The obsessions includes contamination, aggressive thoughts, need for symmetry, taboo thoughts of sex and religion. The theme of compulsion include checking, excessive cleaning, washing arranging, counting and rituals.<sup>[1]</sup> These are time consuming and distressing. Life time prevalence of OCD in adults vary from 1.9% to 3.2 %<sup>[2]</sup> and OCD present itself in 2.7% of general population this disorder effects individual of all age groups among adults men and women equally affected what among adolescent boys are more commonly affected then girls.<sup>[3]</sup>

Age of onset is usually in early adulthood. Since OCD is a chronic disease of early onset, many of its repercussions cover the entire life span of individual.<sup>[4]</sup> It is a fourth most prevent disorder with high comorbidity with other anxiety and mood disorders.<sup>[5]</sup> Most common concurrent psychiatric disorder are major depressive disorder, generalized anxiety disorder, substance abuse, alcohol dependence, phobias, eating disorder, tic disorder, hoarding disorder hair pulling disorder, excoriation, skin picking disorder etc.<sup>[6,7]</sup>

#### 1. Aims and Objective

- a) To study socio demographic profile of patients with OCD.
- b) To study psychiatric comorbidity associated with OCD.

- c) To study severity of OCD.
- d) To study severity of anxiety and depression in OCD.

#### 2. Material and Methods

**Sample:** a cross sectional study design using 45 consecutive patients attending psychiatric OPD in GMC Amritsar, Punjab (India) was carried out. The patient suggestive of OCD were diagnosed and confirmed using ICD 10 criteria for OCD and YBOCS, the diagnosis was further confirmed by consultant.

All the patients were explained about the procedure and were assured of confidentiality of the information.

#### 2.1 Inclusion Criteria

- a) Subjects with confirmed diagnosis of obsessive compulsive disorder.
  - b) Subjects above the age of 18 years.
  - c) Subjects who have given written informed consent.

#### 2.2 Exclusion criteria

- a) Patients who have not given the informed consent.
- b) Patients with mental retardation.
- c) Patients under age of 18 years.
- d) Patient who were found to be suffering from any other major medical or surgical illness.

#### 3. Tools of study

All the selective patients were interviewed by using following tools:

- a) Semi-structured proforma to study social demographic profile.
- b) Yale's Brown obsessive compulsive rating scale YBOCS to study severity of disease.

- c) Consent form.
- d) Hamilton depression rating scale (HAM-D).
- e) Hamilton anxiety rating scale (HAM-A).
- f) M. I. N. I Mini international neuropsychiatric interview rating scale to study comorbidity.

# 4. Results

Out of 45 patients 27 patients were male and 18 of them were female. Out of 45 patients 23 were upto 30 yrs of age17 were of (30-45yr) of age, 3 were of (46-60yr), 2 were >60 yr. 19 of them belonged to rural background, 24 were of urban region and 2 lived in suburban locality. table 1.4 show professional status. table 1.7 show comorbidity.16 of them were hindu and 19 were sikh.31 lived in nuclear families, 11 lived in joint family and 3lived alone, 12 earned upto 10000, 13 had income (10000-20000), 8 had income between 20001-30000, and 9 had income (30000-40000), 2

between (40000-50000), nil between 50000-60000, and 1 above 60000. Among 45, 9 suffered from comorbid bipolar affective disorder (bpad), 33 had comorbid major depressive disorder (mdd), 5 had substance dependence, 10 had anxiety disorder, 1 suffered from epilepsy, and 6 had psychotic symptoms. In occupation 10 were housewives, 3 were semiprofessional, 5 were skilled workers, 9 were students, 7 were unemployed, 7 were unskilled worker, 3 were professional, 1 was retired. Severity of OCD was assessed using Y-BOCS which showed 3 patients i.e. 6% had mild OCD, 19 patients (42.2%) had moderate severity, 22 patients 48.8% had severe and 2 i.e. 4% had severe form of OCD. Severity of depression was assessed using HAM-D (Hamilton depression rating scale) which showed 4 patients 8% had mild depression, 10 had moderate (22%), 11 had severe (24%), 22 had very severe depression (44%). To see severity of anxiety were assessed using HAM-A results as per figure 1.10.

	Table 1.1	
Gender	Male/Female	Percentage
Female	18	40%
Male	27	60%



Table 1.2				
Age	No of Patients	Percentage		
18-30	23	51.11		
31-45	17	37.78		
46-60	3	6.67		
Above 60	2	4.44		





# International Journal of Innovative Research in Medical Science (IJIRMS) Volume 03 Issue 10 Oct 2018, ISSN: 2455-8737, Imp. Factor - 4.102 Available online at - <u>www.ijirms.in</u>

	Table 1.3				
Marital status	No of Patients	Percentage			
Married	24	53.33			
Unmarried	19	42.2			
Divorced	1	2.22			
Remarried	1	2.22			



Figure 1.3

Table 1.4				
Occupation	No of Patients	Percentage		
Housewife	10	2.22		
Semi professional	3	6.67		
Skilled worker	5	11.11		
Student	9	20.00		
Unemployed	7	15.56		
Unskilled worker	7	15.56		
Professional	3	6.67		
Retired	1	2.22		





# International Journal of Innovative Research in Medical Science (IJIRMS) Volume 03 Issue 10 Oct 2018, ISSN: 2455-8737, Imp. Factor - 4.102 Available online at - <u>www.ijirms.in</u>

Table 1.5				
Monthly Income	No. of Patients	Percentage		
upto 10000	12	26.67		
10001-20000	13	28.89		
20001-30000	8	17.78		
30001-40000	9	20.00		
40001-50000	2	4.44		
50001-60000	0	0.00		
60001-70000	1	2.22		



Figure	1.5
--------	-----

Table 1.6				
Rural Urban	No. of Patients	Percentage		
Rural	19	42.22		
Urban	24	53.33		
sub urban	2	4.44		





# International Journal of Innovative Research in Medical Science (IJIRMS) Volume 03 Issue 10 Oct 2018, ISSN: 2455-8737, Imp. Factor - 4.102 Available online at - <u>www.ijirms.in</u>

			Table	1.7				
	BP	AD	MI	DD	RI	DD	Psych	otic
Comorbidity	No. of Pts.	% age	No. of Pts.	% age	No. of Pts.	% age	No. of Pts.	% age
Only	7	15.56%	8	17.78%	3	6.67%	2	4.44%
with substance abuse	1	2.22%	4	8.89%	0	0	0	0
with Anxiety Disorder	2	4.44%	4	8.89%	5	11.11%	0	0
with psychotic	0	0	4	8.89%	0	0	0	0
Dysthymia only	0	0	4	8.89%	0	0	0	0
Epilepsy	0	0	0	0	1	2.22%	0	0



Figure 1.7

		Table 1.8		
Severity of OCD	Mild (8 to 15)	Moderate (16 to 23)	Severe (24 to 31)	Extreme (32 to 40)
No of Patients	3 (6.67%)	19 (42.22%)	22 (48.89%)	2 (4.44%)





		Table 1.9		
Severity of Depression	Mild	Moderate	Severe	Very Severe
No of Patients	4 (8.89%)	10 (2.22%)	11 (24.44%)	20 (44.44%)



#### Figure 1.9

Table 1.10

Severity of Anxiety	Normal	Mild	Moderate	Severe
No of Patients	8 (17.78%)	12 (26.67%)	22 (48.89%)	c) (6.67%)



Figure	1.10
--------	------

Relation of YBOCS with Ham-D								
	Total							
YBOCS Score	0 to 7	8 to 13	14 to 18	19 to 22	$\geq$ to 23	1		
<sup>•</sup> 8-15	42.9%	57.1%	.0%	.0%	.0%	100.0%		
16-23	.3%	36.8%	42.1%	10.5%	5.3%	100.0%		
24-31	.0%	16.7%	41.7%	8.3%	33.3%	100.0%		
32-40	.0%	.0%	14.3%	.0%	85.7%	100.0%		
Total	8.9%	28.9%	31.1%	6.7%	24.4%	100.0%		

International Journal of Innovative Research in Medical Science (IJIRMS) Volume 03 Issue 10 Oct 2018, ISSN: 2455-8737, Imp. Factor - 4.102 Available online at - www.ijirms.in



■ 0 to 7 ■ 8 to 13 ■ 14 to 18 ■ 19 to 22 ■ ≥ to 23

P value<0.001 that is highly significant.

		Total			
YBOCS Score	<17	18 to 24	25 to 30	> 30	
·8-15	85.7%	14.3%	.0%	.0%	100.0%
16-23	26.3%	57.9%	10.5%	5.3%	100.0%
24-31	41.7%	33.3%	16.7%	8.3%	100.0%
32-40	14.3%	57.1%	28.6%	.0%	100.0%
Total	37.8%	44.4%	13.3%	4.4%	100.0%



■ '<17 ■ 18 to 24 ■ 25 to 30 ■ '> 30

p-value 0.202 that is not significant.

#### 6. Discussion

Age of the patients in our study was in range 15 -70 years. Majority (89%) of the patients were below 45 years and only (11%) were above 45 years. This finding is supported by study of Chakraborty&Banerjee<sup>[8]</sup> who found that 78% of the patients were below 40 years. In our study gender wise distribution showed that 60% are males and 40% are females. This study is supported by

study conducted by Dr. Gajanand Verma & Dr. Brajesh Kumar Mahawar in jaipur. The mean age was higher in males than in females. This finding is supported by Girish Chandra BJ & Sumant Khanna.<sup>[9]</sup>

Regarding marital status 53.3% are married, 43% are unmarried, 2.2% are divorced, 2.2% are patients that have remarried. It is obvious that significantly higher number of OCD patients are married. This matches the study by Elisabeth A Nelson et al<sup>[10]</sup> who found that large portion of OCD patients are married.

Regarding occupation 22% of patients of OCD were housewives, 20% were students, 15% were unemployed, 15% were unskilled workers, 11% were skilled, 6% were semi professional, 6% were professional, 2% were retired.53% lived in urban, 42% lived in rural, 5% resided in suburban. This study matched with the study done by Fatemah Assarian et al.<sup>[11]</sup> This may be due to urban people have easy approach and are aware about psychiatric illness.

In our study we found that majority of patients suffered from mood disorder which included 8 of MDD only, 3 of RDD only, 7 of BPAD only and 2 were psychotic also, it was seen 4 MDD patients with substance abuse, 1 patient had BPAD with substance abuse, 4 patients of MDD had MDD with anxiety disease, 5 had RDD with anxiety, 2 had BPAD with anxiety disease, 5 were dysthymic and 3 had MDD with psychotic features, 1 patient had history of epilepsy.

24%: mixed anxiety + depression, 51% had depression, 11.1% had substance abuse, 4% had schizophrenia or other psychotic illness, 2% had epilepsy and remaining had bpad. This is in accordance with the study of Dr. Ganjanand Verma & Dr. Brajesh Kumar Mahawar. Regarding the severity of assessment of OCD HAM-A: 48% belonged to moderate, 26% belonged to mild, 17.7% to normal & 6% to severe anxiety. This is in accordance with the study conducted by Overbeek et al.<sup>[12]</sup> They found anxiety is common among OCD patients.Severity of anxiety using HAM-A was compared with severity of OCD using YBOCS and results were not significant p-value-0.202.Our results matched with study by Girishchandra et al.<sup>[9]</sup> Severity of depression was assessed using HAM-D that came out to be highly significant that is p-value <0.001. This finding is concurrent with the study conducted by Rusco et al<sup>[13]</sup> who found comorbid depression to be a major psychiatric problem in OCD patients.

# 7. Limitations

It's a cross- sectional study. So longitudinal and prospective studies with larger sample size from different centre may be studied to explore various psychiatric morbidity in different population.

# 8. Bibliography

- Khanna S, Channabasavanna SM. Phenomenology of obsessions in obsessive-compulsive neurosis. Psychopathology. 1988;21(1):12-8.
- [2] Stein MB, Forde DR, Anderson G, Walker JR. Obsessive-compulsive disorder in the community: an epidemiologic survey with clinical reappraisal. American Journal of Psychiatry. 1997 Aug 1;154(8):1120-6.
- [3] Benjamin Sadock MD, Virginia Alcott Sadock MD. Synopsis of psychiatry.10 ed. Wolter Kluwer; 2007.
- [4] Knapp M, Henderson J, Patel A. Costs of obsessivecompulsive disorder: A Review. In: Maj M, Sartorius N, Okasha A, Zohar J, editor. Obsessive –Compulsive Disorder. 2. New York, Wiley; 2002.
- [5] Rasmussen SA, Eisen JL. Epidemiology of obsessive compulsive disorder. The Journal of clinical psychiatry. 1990;51(suppl 2):10-13.
- [6] Hantouche EG, Bouhassira M, Lancrenon S, Ravily V, Bourgeois M. Prevalence of obsessive-compulsive disorders in a large French patient population in psychiatric consultation. L'Encephale. 1995;21(5):571-80.
- [7] Rasmussen SA, Eisen JL. The epidemiology and differential diagnosis of obsessive-compulsive disorder. InZwangsstörungen/obsessive-compulsive disorders 1992;53:4-10.
- [8] Chakraborty A, Banerji G. Ritual, a culture specific neurosis, and obsessional states in Bengali culture. Indian journal of psychiatry. 1975 Jul 1;17(3):211.
- [9] Girishchandra BG, Khanna S. Phenomenology of obsessive compulsive disorder: a factor analytic approach. Indian journal of psychiatry. 2001 Oct;43(4):306.
- [10] Nelson EA, Abramowitz JS, Whiteside SP, Deacon BJ. Scrupulosity in patients with obsessive-compulsive disorder: Relationship to clinical and cognitive phenomena. Journal of anxiety disorders. 2006 Jan 1;20(8):1071-86.
- [11] Assarian F, Biqam H, Asqarnejad A. An epidemiological study of obsessive-compulsive disorder among high school students and its relationship with religious attitudes. Arch Iran Med. 2006 Apr;9(2):104-7.
- [12] 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; 63:1106-12.
- [13] Ruscio AM, Stein DJ, Chiu WT, Kessler RC. The epidemiology of obsessive-compulsive disorder in the National Comorbidity Survey Replication. Molecular psychiatry. 2010 Jan;15(1):53.