



PREVALENCE OF OBSESSIVE COMPULSIVE SYMPTOMS IN PSYCHIATRIC DISORDERS: A CROSS SECTIONAL STUDY

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ABSTRACT

Background : Obsessive compulsive symptoms (OCS) have known to co-occur with various psychiatric disorders and have an impact on severity and course of these psychiatric disorders.

Knowing the prevalence of OCS in different psychiatric disorders can give a better understanding about the illness and help in shaping its management. This study aims at finding prevalence, types & severity of OCS in patients presenting with different psychiatric disorders in Psychiatry Outpatient department at a tertiary care institute.

Methodology : A total of 380 patients were included in the. Clinical diagnosis of obsessions & compulsions was made as per criteria in Diagnostic & Statistical Manual for Mental Disorders Fourth Edition, Text Revision (DSM IV- TR). Yale Brown Obsessive Compulsive Scale (YBOCS) was applied for assessing severity of obsessive compulsive symptoms.

Results & Conclusion: Prevalence of OCs in Psychiatric Disorders to be 5%. The Prevalence of OCS in patients with Psychotic Disorders was found to be 9.9% , in patients with Mood Disorders was found to be 6.6%, in patients with Anxiety Disorders was found to be 2.3% and in patients with Substance Use Disorders was found to be 1.8%. The most common Form of Obsession was Obsessive Thoughts (31.6%), the most common Content was Inanimate-Impersonal (31.6%) and the most common Compulsion was Washing (60%). Mean YBOCS Score of all 19 patients was 9.95 (SD=5.1, Median=9). 36.8% patients had Subclinical Severity (0-7), 47.4% patients had Mild Severity (8-15) and 15.8% patients had Moderate Severity (16-23). Psychotic & mood disorders were further assessed for types & severity of OCS. Though the prevalence of OCS in current study is less compared to previous studies, it still is significant. Thus various psychiatric disorders should be evaluated for presence of OCS.

KEYWORDS : Obsessive compulsive symptoms, prevalence, psychiatric disorders

INTRODUCTION

The clinical phenomenon of obsessive-compulsive symptoms (OCS) coexistent with various clinical disorders has intrigued clinicians for over a century. It was in the 19th century that Westphal considered OC symptoms to be either a prodrome or an integral part of schizophrenia, as did Bleuler earlier in this century (1,2). Both Kraepelin and Heilbronner believed that there was an intimate relationship between obsessions and manic depressive psychosis (3,4). Lewis believed that obsessions in many instances were merely a manifestation of a universal psychic attribute, aggravated by the occurrence of some morbid state such as anxiety or depression (5).

OCS in Schizophrenia & psychotic disorders

Previous studies which have used proper diagnostic interview [Diagnostic and Statistical Manual of Mental Disorders (DSM)-IV; Structured Clinical Interview for DSM-IV Axis I Disorders (SCID)] and Yale–Brown Obsessive–Compulsive Symptom checklist (YBOCS) have estimated the prevalence of OCS in Schizophrenia ranging between 14% and 26% (6,7). Previous meta analyses conclude that 12% of patients with schizophrenia also fulfil the criteria for obsessive–compulsive disorder (OCD) and that about 30% report obsessive, distressing, intrusive thoughts and related compulsions (8,9). Research done to evaluate the clinical impact of comorbid OCS in schizophrenia showed greater levels of hopelessness, lower quality of life, more social dysfunction and a higher degree of cognitive impairment. Consequently, patients with schizophrenia and comorbid OCS were reported to have a less favourable prognosis (10,11,12).

OCS in anxiety & depressive disorders

According to existing literature Obsessive compulsive symptoms (OCS) occur in 30% to 40% of patients with an anxiety or a depressive disorder (13). In depressive disorders, OCS are associated with poorer outcome (14). Research indicates presence of OCS in anxiety and depressive disorders in general is associated with severity and chronicity (15,16).

OCS in bipolar disorders

There are many studies citing the presence of Mood Disorders like a depressive episode occurring secondary to OCD but studies on presence of Obsessive Compulsive Symptoms in Bipolar disorders are very few. Majority have studied OCS in context of OCD and not as an independent entity. Existing literature reports that 11 to 21% of persons with bipolar disorder experience comorbid OCD at some time during the course of their bipolar disorder (17). Most studies indicate that

comorbid OCD exacerbates the symptoms of bipolar disorder leading to difficulty and challenges in treatment. It has been observed that Bipolar patients with comorbid OCD have more episodes of depression, higher rates of suicide, more chronic episodes and residual symptoms (18,19).

OCS in substance use disorders

A study done to find prevalence of OCS in alcoholic use patients found that the prevalence of probable OCD was high (20.4%) (20) Compared with non-OCD alcoholics, probable OCD alcoholics more severe depressive symptoms and alcohol dependence, and more lifetime suicidal ideation, suicide plans and attempts This signifies the importance to actively investigate OCD symptoms in patients seeking treatment for substance use disorders and to indicate appropriate therapeutic interventions (21).

AIMS & OBJECTIVES:-

1. To study the prevalence, types and severity of obsessive compulsive symptoms in psychiatric disorders.

MATERIALS AND METHODS

It was a cross sectional study carried out at psychiatry outpatient department of a tertiary care institute. Sampling was done over period of 10 months. Minimum required sample size was calculated, which came out to be 246. Sample size was calculated based on following formula

$$\text{Sample size} = \frac{Z_{1-\alpha/2}^2 P(1-p)}{d^2} \quad (22).$$

$Z_{1-\alpha/2}$ = standard normal variate (at 5% type 1 error ($P < 0.05$) it is 1.96 and at 1% type 1 error ($P < 0.01$) it is 2.58). As in majority of studies P values are considered significant below 0.05 hence 1.96 is used in formula. p = Expected proportion in population based on previous studies or pilot studies. Most of the studies have been done to find out prevalence of OCS in schizophrenia. So here we take it from a similar previous study, which found it to be 20% (23). d = Absolute error or precision – The researcher wants to calculate this sample size with the precision/absolute error of 5% and at type 1 error of 5%.

INCLUSION CRITERIA

1) Patients aged 18-60 years of age, attending psychiatry OPD, over a period of 10 months, having single Axis I psychiatric diagnosis

- as per DSM IV –TR
 2) Patients willing to give consent

EXCLUSION CRITERIA

- 1) Patients diagnosed as Obsessive Compulsive Disorder according to DSM-IV-TR.
- 2) Patients with history suggestive of organic brain pathology.
- 3) Patients having more than one diagnosis on Axis 1 of DSM-IV TR.

TOOLS USED FOR THE STUDY

- 1) Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text revision (DSM IV-TR) (24). It was used for diagnosis of obsessions & compulsions.
- 2) Yale Brown Obsessive compulsive scale (YBOCS)(25)
 The scale, which was designed by Wayne Goodman and his colleagues, is used extensively in research and clinical practice to both determine severity of OCD and to monitor improvement during treatment. This scale rates the severity of obsessive compulsive symptoms. The result can be interpreted as 0 to 7, subclinical; 8 to 15, mild; 16 to 23, moderate; 24 to 31, severe; and 32 to 40, extreme severity.

METHODOLOGY

A total of 380 patients were included in the study after applying inclusion & exclusion criteria. Semi-structured pro-forma was used to collect socio demographic data. Clinical diagnosis made as per criteria in Diagnostic & Statistical Manual for Mental Disorders Fourth Edition, Text Revision (DSM IV- TR). YBOCS applied for assessing severity of obsessive compulsive symptoms. Data thus obtained was pooled and subjected to statistical analysis using the SPSS 16 software and Statistical tests of Frequencies, Independent t Test and Pearson Chi-Square test applied

RESULTS

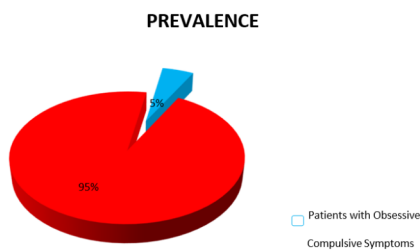


Diagram 1 : Frequency of OCS

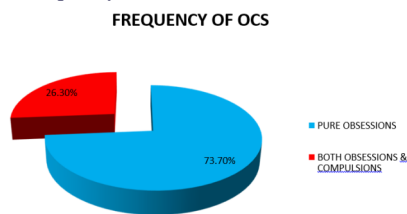


Diagram 2 : Frequency of obsessions & compulsions in patients with OCS

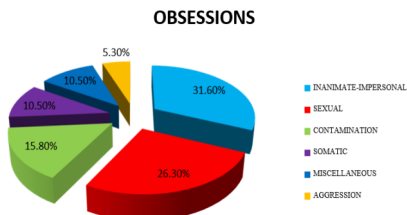


Diagram 3 :

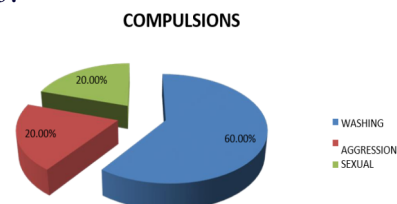


Diagram 4 : Types of Compulsions

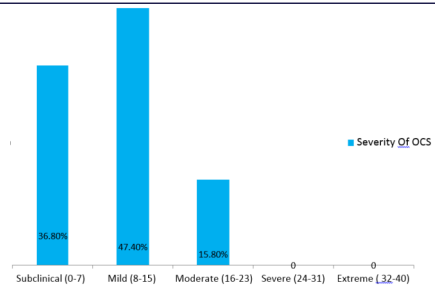


Diagram 5 : Severity of OCS

The severity of Obsessions and Compulsions was assessed using YBOCS Scale. On YBOCS, 7 patients (36.8%) had Subclinical severity i.e. score of 0-7, 9 patients (47.4%) had Mild severity i.e. score of 8-15 and 3 patients (15.8%) had Moderate severity i.e. score of 16-23. Mean YBOCS Score was 9.95 (SD=5.1, Median=9).

TABLE 1 :SOCIODEMOGRAPHIC CHARECTERISTICS

	TOTAL PATIENTS N=380	PATIENTS WITH OCS N=19	PATIENTS WITHOUT OCS N=361
AGE :			
MEAN	34.53.	30.95	34.73
STANDARD DEVIATION	10.547	9.330	10.575
SEX :			
MALE	212 55.8%	12 63.2%	200 55.4%
FEMALE	168 44.2%	7 36.8%	161 44.6%
EDUCATION :			
ILLITERATE	45 11.8%	1 5.3%	45 12.5%
PRIMARY	107 28.2%	14 73.7%	106 29.4%
SECONDARY	157 41.3%	4 21.1%	143 39.6%
GRADUATE POST-GRADUATE	62 16.3%	-	58 16.1%
9 2.4%		9 2.5%	
MARITAL STATUS:			
SINGLE	86 22.6%	9 47.4%	77 22.5%
MARRIED	275 77.4%	10 52.6%	265 73.4%
WIDOWED/ SEPARATED	19 5.0%	-	19 5.3%
SOCIOECONOMIC STATUS:			
LOWER	136 35.8%	9 47.4%	127 35.2%
UPPER LOWER	123 32.4%	3 15.8%	120 33.3%
LOWER MIDDLE	76 20%	4 21.1%	72 19.9%
UPPER MIDDLE	39 10.2%	1 5.3%	38 10.5%
UPPER	6 1.6%	2 10.5%	4 1.1%
OCCUPATION:			
SELF EMPLOYED	37 9.7%	4 21.1%	33 9.1%
SERVICE	154 40.6%	7 36.8%	147 40.7%
HOUSE-WIFE	111 29.2%	5 26.3%	106 29.4%
UNEMPLOYED	78 20.5%	3 15.8%	75 20.8%
TYPE OF FAMILY:			
NUCLEAR	192 50.5%	8 42.1%	184 51.0%
JOINT	188 49.5%	11 57.9%	177 49.0%

TABLE 2 : FREQUENCY OF OCS IN VARIOUS PSYCHIATRIC DIAGNOSIS

	TOTAL PATIENTS N=380	PATIENTS WITH OCS N=19	PATIENTS WITHOUT OCS N=361
PSYCHOTIC DISORDERS	81 21.3%	8 42.1%	73 20.2%
MOOD DISORDERS	137 36.1%	9 47.3%	128 35.5%
ANXIETY DISORDERS	44 11.5%	1 5.3%	43 11.9%
SUBSTANCE USE DISORDERS	58 15.3%	1 5.3%	57 15.8%
OTHER DISORDERS	60 15.8%	-	60 16.6%

Of the 19 patients with OCS, 8(42.1%) patients had Psychotic Disorders, 9 (47.4%) patients had Mood Disorders, 1(5.3%) had Anxiety Disorder and 1(5.3%) had Substance Use Disorders.

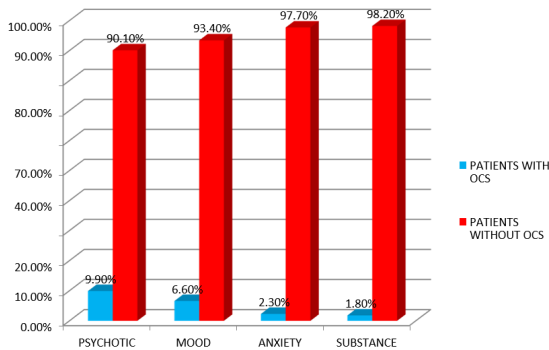


Diagram 6 : Frequency of OCS in Various psychiatric disorders

Patients with Psychotic Disorders and Patients with Mood Disorders were further assessed on these parameters: Types and Severity of OCS

OCS AND PSYCHOTIC DISORDERS

Of the 380 patients in this study 81 patients had a Psychotic Disorder and of these 81 patients, 8 patients had OCS. The Prevalence of OCS in patients with Psychotic Disorder was found to be 9.9%.

Of the 8 patients Obsessions were found in all 8 patients and Compulsions were found in 4 patients. The most common Obsession was Sexual in 3 (37.5%) patients followed by Contamination in 2 (25%) patients. Somatic Obsessions, Aggressive Obsessions and Miscellaneous Obsessions were seen in 1 (12.5%) patient each.

Of the 4 patients with Compulsions, the most common Compulsion was washing in 2 (50%) patients followed by Sexual and Aggressive Compulsions in 1 (25%) patient each. Of the 8 patients with OCS, 4 (50%) patients had Subclinical severity, 2 (25%) had Mild and Moderate severity each. The mean YBOCS Score was 11.25 (SD=5.6, median=9).

PATIENTS WITH MOOD DISORDERS

Of the 380 patients in this study, 137 patients had Mood Disorder and of these 137 patients, 9 patients had OCS. The Prevalence of OCS in patients with Mood Disorder was found to be 6.6%.

Of the 9 patients with OCS, Obsessions were reported in all 9 patients and Compulsions were reported in none. The most common Obsession was Inanimate-Impersonal Obsessions seen in 4 (44.4%) patients followed by Sexual Obsessions and Miscellaneous Obsessions seen in 2 (22.2%) patients each and Somatic Obsession was seen in 1 (11.1%) patient.

Of the 9 patients with OCS, 5 (55.6%) patients had Subclinical severity and 4 (44.4%) had Mild severity. The Mean YBOCS Score was 7.556 (SD=2.186, Median=8).

DISCUSSION

OCS IN SCHIZOPHRENIA & PSYCHOTIC DISORDERS

In this study 81 patients had a Psychotic Disorder and of these 81 patients, 8 patients had OCS. The Prevalence of OCS in patients with Psychotic Disorder was found to be 9.9%. Previous studies have found higher prevalence of OCS in schizophrenia. A study done in south india reported the prevalence of OCS in schizophrenia to be 28% (26), while a study conducted in north india found it to be 18% (27). Our study considered all psychotic spectrum disorders together while other studies studied prevalence in only schizophrenia. This might be the reason that the prevalence of OCS in our study was less compared to other studies.

Of the 8 patients Obsessions were found in all 8 patients and Compulsions were found in 4 patients. The most common Obsession was Sexual in 3 (37.5%) patients followed by Contamination in 2 (25%) patients. Somatic Obsessions, Aggressive Obsessions and Miscellaneous Obsessions were seen in 1 (12.5%) patient each. Of the 4 patients with Compulsions, the most common Compulsion was washing in 2 (50%) patients followed by Sexual and Aggressive Compulsions in 1 (25%) patient each. A previous indian study had

maximum patients suffering from aggressive obsessions(20%) followed by miscellaneous(16%) and Somatic obsessions(14%) & amongst the compulsive symptoms, cleaning was most common. followed by miscellaneous and checking (26). Other studies report most prevalent obsession to be fear of contamination and most prevalent compulsion to be cleaning (27,28). This difference points to the necessity for such more studies to find out common obsessions & compulsions in schizophrenia & other psychotic disorders.

In our study of the 8 patients with OCS, 4 (50%) patients had Subclinical severity, 2 (25%) had Mild and Moderate severity each. The mean YBOCS Score was 11.25 (SD=5.6, median=9). Previous studies report the mean YBOCS score to be 18.24 ± 7.20 (27), 17.9 ± 4.2 (29) and 22.95 ± 9.52 (28). Thus our study reported the mean YBOCS score to be less as compared to other studies.

OCS IN MOOD DISORDERS

Of the 380 patients in this study, 137 patients had Mood Disorder and of these 137 patients, 9 patients had OCS. The Prevalence of OCS in patients with Mood Disorder was found to be 6.6%. A recent meta analytic study found that the cross-sectional prevalence of OCD in Bipolar Disorder patients is 11.2% and the lifetime prevalence rate was 10.9%, suggesting that in Bipolar Disorder patients OCD symptomatology is chronic rather than episodic (30) while as per previous meta-analytic studies, comorbid OCD prevalence in Bipolar Disorder varied from 7.1% (31) to 21.7% (32).

Also literature reports prevalence OCS in 23.6% of the total sample of those with current anxiety & depressive disorders. Research indicates that OCS were associated with severity of the disorder, predicted relapse in those with remitted anxiety and/or depressive disorders (33). This impact of OCS on severity and course of mood disorders highlights the significance of evaluating for OCS in mood disorders.

Of the 9 patients with OCS in mood disorders, Obsessions were reported in all 9 patients and Compulsions were reported in none. The most common Obsession was Inanimate-Impersonal Obsessions seen in 4 (44.4%) patients followed by Sexual Obsessions and Miscellaneous Obsessions seen in 2 (22.2%) patients each and Somatic Obsession was seen in 1 (11.1%) patient. In a previous study done to explore Obsessive compulsive disorder in Bipolar affective disorder patients, it was found that among the obsessive symptoms, contamination obsession (69.2%) was the most prevalent type, followed by aggressive obsession (57.7%), somatic obsession (34.6%), obsession for hoarding (30.8%), and obsession for symmetry (30.8%) & among compulsions, checking was the most common type, occurring in 80.8% of the subjects, followed by cleaning (57.7%) and hoarding (42.3%).

In this study, of the 9 patients with OCS in mood disorders, 5 (55.6%) patients had Subclinical severity and 4 (44.4%) had Mild severity. The Mean YBOCS Score was 7.556 (SD=2.186, Median=8).

OCS IN ANXIETY DISORDERS & SUBSTANCE USE DISORDERS

Our study found the prevalence of OCS in anxiety disorders to be 2.3%. There is scarcity in literature regarding OCS in anxiety disorders. One study reports the prevalence of OCS in anxiety disorders to be 30%. The reason of low prevalence in our study might be due to less sample size. In this study the prevalence of OCS in substance use disorders was found to be 1.72%. In a recent study, one-month prevalence of probable OCD among the alcoholics under outpatient treatment was 20.4%

CONCLUSION

Our study reports the prevalence rates of obsessive compulsive symptoms in various psychiatric disorders – 9.9% in psychotic disorders, 6.6% in mood disorders, 2.3% in anxiety disorders & 1.72% in substance use disorders. Severity of OCS was mostly in subclinical to mild range. Though the prevalence is less compared to previous studies, it still depicts a significant prevalence rate. There have been studies in the past signifying the impact of OCS on severity and course of various psychiatric disorders. Future studies need to be carried out to find the prevalence, clinical correlates of OCS in psychiatric disorders and impact of OCS on course of psychiatric disorders.

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