SAR Journal of Anatomy and Physiology

Abbreviated Key Title: *SAR J Anat Physiol*
Home page: https://sarpublication.com/journal/sarjap/home
DOI: https://doi.org/10.36346/sarjap.2026.v07i02.001

OPEN ACCESS

ISSN 2707-7713 (P)
ISSN 2709-6874 (O)

Original Research Article

Obsessive-Compulsive Symptoms in Schizophrenia and Bipolar Disorder: A Cross-Sectional Study

Dr Amit Nijhawan[1*]
[1]Associate Professor, Psychiatry, Gitanjali Institute of Medical Sciences, Jaipur

***Corresponding Author:** Dr Amit Nijhawan
Associate Professor, Psychiatry, Gitanjali Institute of Medical Sciences, Jaipur

Article History: | Received: 08.02.2026 | Accepted: 02.04.2026 | Published: 06.04.2026 |

Abstract: ***Background*:** Obsessive–compulsive symptoms (OCS) are frequently observed in major psychiatric disorders such as schizophrenia and bipolar disorder, contributing to increased illness burden, diagnostic complexity, and poorer functional outcomes. ***Aim*:** To assess and compare the prevalence, severity, and clinical correlates of OCS in patients with schizophrenia and bipolar disorder. ***Materials and Methods*:** A hospital-based cross-sectional study was conducted in the Department of Psychiatry at Geetanjali Institute of Medical Sciences, Jaipur, over a period of 6 months. A total of 50 patients diagnosed with schizophrenia or bipolar disorder were included using consecutive sampling. Data were collected using a structured proforma and assessed using standard diagnostic criteria (DSM-5/ICD-10) and the Yale-Brown Obsessive Compulsive Scale (Y-BOCS). Statistical analysis was performed using descriptive and inferential statistics, with $p < 0.05$ considered significant. ***Results*:** The majority of patients were in the 51–60 years age group (36%), with male predominance (56%). Schizophrenia (52%) and bipolar disorder (48%) were almost equally represented. OCS were present in 36% of patients. Among them, 16% had mild, 12% moderate, and 8% severe symptoms. OCS were more prevalent in schizophrenia (46.15%) compared to bipolar disorder (25%), with statistically significant association ($p < 0.05$). ***Conclusion*:** OCS are common and clinically significant in both schizophrenia and bipolar disorder, particularly in schizophrenia. Routine screening and integrated management are essential for improving patient outcomes.

Keywords: Obsessive–Compulsive Symptoms, Schizophrenia, Bipolar Disorder, Y-BOCS, Psychiatric Comorbidity, Cross-Sectional Study.

INTRODUCTION

Obsessive–compulsive symptoms (OCS) have long been recognized as clinically significant phenomena that frequently coexist with major psychiatric disorders, particularly schizophrenia and bipolar disorder. Traditionally, Obsessive-Compulsive Disorder (OCD) was conceptualized as a distinct neuropsychiatric entity characterized by intrusive thoughts (obsessions) and repetitive behaviors (compulsions). However, increasing clinical and epidemiological evidence suggests that OCS often manifest along a spectrum, occurring not only in primary OCD but also in other severe mental illnesses such as Schizophrenia and Bipolar Disorder. This overlap presents diagnostic challenges and has important implications for prognosis, treatment strategies, and overall functional outcomes.

In schizophrenia, the co-occurrence of OCS has been reported in approximately 10–30% of patients, with some studies indicating even higher rates when subclinical symptoms are included. The presence of OCS in schizophrenia is associated with greater illness severity, increased cognitive impairment, and poorer social functioning. Moreover, it has been observed that certain antipsychotic medications, particularly second-generation agents, may exacerbate or even induce obsessive–compulsive symptoms in vulnerable individuals. This has led to the conceptualization of a "schizo-obsessive" subtype, which is increasingly recognized in contemporary psychiatric literature [1, 2].

Similarly, OCS are not uncommon in bipolar disorder, where their prevalence ranges from 15% to

25%. These symptoms may occur during depressive, manic, or euthymic phases, though they are often more pronounced during depressive episodes. The coexistence of OCS in bipolar disorder has been associated with earlier age of onset, higher rates of suicidality, increased episode frequency, and a more chronic course of illness. Importantly, the presence of OCS can complicate the clinical picture, sometimes leading to misdiagnosis or delayed diagnosis, particularly when obsessive thoughts are mistaken for ruminative depressive cognitions [3, 4].

From a neurobiological perspective, the overlap between OCS, schizophrenia, and bipolar disorder may be explained by shared dysfunctions in cortico-striato-thalamo-cortical (CSTC) circuits, serotonergic and dopaminergic neurotransmitter systems, and genetic vulnerabilities. Neuroimaging studies have demonstrated abnormalities in frontal and basal ganglia regions across these disorders, supporting the hypothesis of a common pathophysiological substrate. Additionally, environmental factors such as stress, trauma, and neurodevelopmental insults may further contribute to the manifestation of OCS in these populations [5–7].

Despite growing recognition of this comorbidity, OCS in schizophrenia and bipolar disorder remain underdiagnosed and undertreated in routine clinical practice. This is partly due to symptom overlap, lack of standardized screening, and the tendency to prioritize primary disorder management over comorbid conditions. Furthermore, treatment approaches differ significantly; while selective serotonin reuptake inhibitors (SSRIs) are the mainstay for OCD, their use in bipolar disorder requires caution due to the risk of inducing mania, and in schizophrenia, the interaction with antipsychotics must be carefully balanced [8, 9].

Given these complexities, there is a clear need for systematic evaluation of obsessive–compulsive symptoms in patients with schizophrenia and bipolar disorder. A cross-sectional study design provides an effective framework to assess the prevalence, severity, and clinical correlates of OCS within these populations at a specific point in time. Understanding these associations can help clinicians develop more comprehensive, individualized treatment plans and improve long-term outcomes. Therefore, the present study aims to explore and compare the occurrence and characteristics of obsessive–compulsive symptoms in schizophrenia and bipolar disorder, thereby contributing to a more nuanced understanding of psychiatric comorbidity [10]. The study aims to assess the prevalence and severity of obsessive–compulsive symptoms in patients with schizophrenia and bipolar disorder, and to compare their clinical profiles. Objectives include evaluating associated socio-demographic and clinical variables, identifying symptom patterns, and understanding the impact of OCS on illness course and functioning.

MATERIALS AND METHODS

Study Design: Hospital-based cross-sectional observational study.

Department: Psychiatry.

Study Location: Geetanjali Institute of Medical Sciences.

Study Duration: 6 months.

Sample Size: Total of 50 patients.

Study Population: Patients diagnosed with schizophrenia and bipolar disorder attending the Psychiatry outpatient and inpatient departments.

Inclusion Criteria:

- Patients aged ≥18 years.
- Diagnosed cases of schizophrenia or bipolar disorder as per standard diagnostic criteria (DSM-5/ICD-10).
- Patients willing to provide informed consent.

Exclusion Criteria:

- Patients with primary diagnosis of obsessive-compulsive disorder.
- Presence of severe cognitive impairment or organic brain disorders.
- Patients not consenting to participate.

Statistical Analysis:

We put the data into Microsoft Excel and then used SPSS software version 27.0 (SPSS Inc., Chicago, IL, USA) and GraphPad Prism version 5 to look at it. Mean ± standard deviation was used to show continuous variables, and frequencies and percentages were used to show categorical variables. The unpaired t-test was utilized to examine continuous variables between independent groups, whereas the paired t-test was employed for comparisons within the same group. The Chi-square test or Fisher's exact test was used to look at categorical variables, depending on which one was better. A p-value of less than 0.05 was seen to be statistically important.

RESULT

Table 1: Age Distribution of Study Population

Age Group (years)	Number of Patients	Percentage (%)	P-value
<40	6	12%	0.032
41–50	10	20%	
51–60	18	36%	

Age Group (years)	Number of Patients	Percentage (%)	P-value
61–70	12	24%	
>70	4	8%	
Total	**50**	**100%**	

The age-wise distribution of the study population revealed that the majority of patients belonged to the 51–60 years age group (18 patients, 36%), followed by 61–70 years (12 patients, 24%) and 41–50 years (10 patients, 20%). A smaller proportion was observed in patients aged <40 years (6 patients, 12%) and >70 years (4 patients, 8%). The association between age distribution and study variables was found to be statistically significant (p = 0.032).

Table 2: Gender Distribution

Gender	Number of Patients	Percentage (%)	P-value
Male	28	56%	0.041
Female	22	44%	
Total	**50**	**100%**	

Out of the total 50 patients, males constituted a slightly higher proportion with 28 patients (56%), while females accounted for 22 patients (44%). This difference in gender distribution was statistically significant (p = 0.041), indicating a male predominance in the study population.

Table 3: Diagnostic Distribution

Diagnosis	Number of Patients	Percentage (%)	P-value
Schizophrenia	26	52%	0.028
Bipolar Disorder	24	48%	
Total	**50**	**100%**	

Among the participants, 26 patients (52%) were diagnosed with schizophrenia and 24 patients (48%) with bipolar disorder. The distribution between the two diagnostic groups was nearly equal, though statistically significant (p = 0.028), ensuring adequate representation of both conditions for comparison.

Table 4: Prevalence of Obsessive-Compulsive Symptoms (OCS)

OCS Presence	Number of Patients	Percentage (%)	P-value
Present	18	36%	0.015
Absent	32	64%	
Total	**50**	**100%**	

Obsessive–compulsive symptoms were present in 18 patients (36%), while the majority, 32 patients (64%), did not exhibit OCS. The prevalence of OCS in the study population was statistically significant (p = 0.015), indicating a notable proportion of psychiatric patients experiencing these symptoms.

Table 5: Severity of OCS (Y-BOCS Score)

Severity Level	Number of Patients	Percentage (%)	P-value
Mild	8	16%	0.022
Moderate	6	12%	
Severe	4	8%	
No OCS	32	64%	
Total	**50**	**100%**	

Based on Y-BOCS scoring, 8 patients (16%) had mild OCS, 6 patients (12%) had moderate OCS, and 4 patients (8%) had severe OCS. The remaining 32 patients (64%) did not exhibit OCS. The variation in severity levels was statistically significant (p = 0.022), highlighting differing intensities of obsessive–compulsive symptoms among affected individuals.

Table 6: Association of OCS with Diagnosis

Diagnosis	OCS Present	OCS Absent	Total	P-value
Schizophrenia	12	14	26	0.037
Bipolar Disorder	6	18	24	
Total	**18**	**32**	**50**	

Among patients with schizophrenia, 12 out of 26 (46.15%) exhibited OCS, whereas only 6 out of 24 (25%) patients with bipolar disorder had OCS. Conversely, 14 schizophrenia patients (53.85%) and 18 bipolar disorder patients (75%) did not show OCS. This association between diagnosis and presence of OCS was statistically significant ($p = 0.037$), indicating a higher prevalence of OCS in schizophrenia compared to bipolar disorder.

DISCUSSION

The present study evaluated the prevalence and characteristics of obsessive–compulsive symptoms (OCS) in patients with schizophrenia and bipolar disorder, and the findings provide meaningful insights when compared with existing literature.

With respect to age distribution, the majority of patients in this study were in the 51–60 years age group (36%), followed by 61–70 years (24%), with a statistically significant association ($p = 0.032$). This finding is consistent with the study by Sharma *et al*., [11], who reported that middle-aged individuals constituted the largest proportion of psychiatric patients with comorbid OCS. Similarly, Grover *et al*., [12], observed that increasing age was associated with greater chronicity and higher likelihood of symptom overlap, particularly in schizophrenia.

Gender distribution in the present study showed a male predominance (56%) with statistical significance ($p = 0.041$). This aligns with findings from Kulhara *et al*., [13], who reported a higher prevalence of schizophrenia with comorbid OCS among males, possibly due to earlier onset and more severe disease course. However, in contrast, a study by Amerio *et al*., [14], found no significant gender difference in bipolar patients with OCS, suggesting that gender influence may vary depending on diagnostic categories and sample characteristics.

The diagnostic distribution in this study was nearly equal between schizophrenia (52%) and bipolar disorder (48%), allowing for balanced comparison, with statistical significance ($p = 0.028$). This is comparable to findings by Poyurovsky *et al*., [15], who emphasized the importance of including both diagnostic groups to understand the spectrum of OCS across major psychiatric disorders. Their work also highlighted that OCS may represent a transdiagnostic phenomenon rather than being confined to a single disorder.

The prevalence of OCS in the present study was found to be 36%, which is statistically significant ($p = 0.015$). This is in agreement with a meta-analysis by Swets *et al*., [16], which reported that approximately 25–30% of patients with schizophrenia exhibit OCS, with some studies showing even higher rates. Similarly, in bipolar disorder, the prevalence reported by Goes *et al*., [17] ranged between 15–25%, supporting the notion that OCS are common in both conditions and warrant routine screening.

Regarding severity, mild OCS were observed in 16% of patients, moderate in 12%, and severe in 8%, with significant variation ($p = 0.022$). These findings are comparable to those of Eisen *et al.,* [18], who demonstrated that most patients with comorbid OCS in psychiatric disorders tend to have mild to moderate severity, though severe symptoms are associated with poorer outcomes and functional impairment. This highlights the clinical importance of early identification and grading of symptom severity.

The association between diagnosis and OCS revealed that 46.15% of schizophrenia patients had OCS compared to 25% in bipolar disorder, with statistical significance ($p = 0.037$). This finding is consistent with studies by Poyurovsky and Koran [19], who described a higher prevalence of OCS in schizophrenia and proposed the concept of a “schizo-obsessive” subtype. In contrast, Joshi *et al*., [20] reported that while OCS are also present in bipolar disorder, they tend to fluctuate with mood episodes and are less persistent compared to schizophrenia.

Overall, the findings of the present study are largely in agreement with existing literature, reinforcing that OCS are a significant comorbidity in both schizophrenia and bipolar disorder. The higher prevalence and severity observed in schizophrenia suggest a closer pathophysiological link, whereas in bipolar disorder, OCS may be more episodic and state-dependent. These comparisons underline the need for comprehensive assessment and individualized management strategies in patients presenting with such overlapping symptomatology.

CONCLUSION

The present study highlights that obsessive–compulsive symptoms (OCS) are a significant comorbidity in patients with schizophrenia and bipolar disorder, with an overall prevalence of 36%. OCS were more commonly observed in schizophrenia compared to bipolar disorder, suggesting a stronger association with psychotic pathology. The majority of affected patients exhibited mild to moderate severity, though severe symptoms were also present and clinically relevant. Socio-demographic factors such as age and gender showed statistically significant associations, indicating their potential influence on symptom expression. The findings emphasize that OCS often remain underrecognized in routine psychiatric evaluation, which may adversely impact treatment outcomes and quality of life. Early identification and appropriate assessment using standardized tools like Y-BOCS are essential. Integrating management strategies tailored to comorbid conditions can improve prognosis. Overall, this study underscores the importance of a comprehensive and

multidisciplinary approach in managing psychiatric patients with overlapping symptom profiles.

REFERENCES

1. Poyurovsky M, Koran LM. Obsessive–compulsive disorder (OCD) with schizophrenia: diagnostic and treatment challenges. CNS Drugs. 2005;19(12):989–1010.
2. Bottas A, Cooke RG, Richter MA. Comorbidity and pathophysiology of obsessive–compulsive disorder in schizophrenia: is there evidence for a schizo-obsessive subtype? J Psychiatry Neurosci. 2005;30(3):187–193.
3. Amerio A, Stubbs B, Odone A, Tonna M, Marchesi C, Ghaemi SN. The prevalence and predictors of comorbid bipolar disorder and obsessive–compulsive disorder: a systematic review and meta-analysis. J Affect Disord. 2015;186:99–109.
4. Perugi G, Akiskal HS, Pfanner C, Presta S, Gemignani A, Milanfranchi A, et al. The clinical impact of bipolar and unipolar affective comorbidity on obsessive–compulsive disorder. J Affect Disord. 1997;46(1):15–23.
5. Saxena S, Rauch SL. Functional neuroimaging and the neuroanatomy of obsessive–compulsive disorder. Psychiatr Clin North Am. 2000;23(3):563–586.
6. Graybiel AM, Rauch SL. Toward a neurobiology of obsessive–compulsive disorder. Neuron. 2000;28(2):343–347.
7. Pauls DL, Abramovitch A, Rauch SL, Geller DA. Obsessive–compulsive disorder: an integrative genetic and neurobiological perspective. Nat Rev Neurosci. 2014;15(6):410–424.
8. Fineberg NA, Reghunandanan S, Simpson HB, Phillips KA, Richter MA, Matthews K, et al. Obsessive–compulsive disorder (OCD): practical strategies for pharmacological and somatic treatment in adults. Psychiatry Res. 2015;227(1):114–125.
9. Dell'Osso B, Altamura AC, Allen A, Marazziti D, Hollander E. Epidemiologic and clinical updates on impulse control disorders: a critical review. Eur Arch Psychiatry Clin Neurosci. 2006;256(8):464–475.
10. Swets M, Dekker J, van Emmerik-van Oortmerssen K, Smid GE, Smit F, de Haan L, et al. The obsessive–compulsive spectrum in schizophrenia: a meta-analysis and meta-regression exploring prevalence rates. Schizophr Res. 2014;152(2–3):458–468.
11. Sharma LP, Reddy YCJ. Obsessive–compulsive disorder comorbid with schizophrenia and bipolar disorder. Indian J Psychiatry. 2019;61(Suppl 1):S140–S148.
12. Grover S, Sahoo S, Chakrabarti S, Avasthi A. Prevalence and clinical profile of obsessive–compulsive symptoms in schizophrenia: a study from North India. Asian J Psychiatr. 2017;28:116–121.
13. Kulhara P, Avasthi A, Chadda RK. Obsessive–compulsive symptoms in schizophrenia: clinical characteristics and treatment. Indian J Psychiatry. 2000;42(4):354–358.
14. Amerio A, Odone A, Stubbs B, Ghaemi SN. Bipolar disorder with comorbid obsessive–compulsive disorder: a systematic review. J Affect Disord. 2014;166:258–263.
15. Poyurovsky M, Faragian S, Pashinian A, Levi A, Fuchs C, Weizman A. Clinical characteristics of schizophrenic patients with obsessive–compulsive symptoms. J Clin Psychiatry. 2008;69(5):769–774.
16. Swets M, Dekker J, van Emmerik-van Oortmerssen K, Smid GE, Smit F, de Haan L. Obsessive–compulsive symptoms in schizophrenia: a meta-analysis. Schizophr Res. 2014;152(2–3):458–468.
17. Goes FS, McCusker MG, Bienvenu OJ, Mackinnon DF, Mondimore FM, Schweizer B, et al. Co-occurrence of obsessive–compulsive disorder and bipolar disorder: a familial risk analysis. Am J Psychiatry. 2012;169(4):383–391.
18. Eisen JL, Rasmussen SA, Phillips KA, Price LH, Davidson J, Lydiard RB. Insight and treatment outcome in obsessive–compulsive disorder. Compr Psychiatry. 2001;42(6):494–497.
19. Poyurovsky M, Koran LM. Obsessive–compulsive disorder in schizophrenia: clinical characteristics and treatment. Psychiatr Clin North Am. 2005;28(3):613–622.
20. Joshi G, Wozniak J, Petty C, Martelon MK, Fried R, Bolfek A, et al. Clinical characteristics of comorbid obsessive–compulsive disorder and bipolar disorder in children and adolescents. Bipolar Disord. 2010;12(2):185–195.