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Original Research Article

BURDEN OF OBSESSIVE-COMPULSIVE SYMPTOMS IN PATIENTS OF SCHIZOPHRENIA

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ABSTRACT

Background: Obsessive-compulsive symptoms (OCS) are clinically important yet frequently under-recognized in schizophrenia and may complicate illness course and management. The Aim is to determine the burden of OCS and describe the sociodemographic and clinical profile of patients with schizophrenia.

Materials and Methods: This hospital-based cross-sectional observational study included 130 adults with DSM-5 schizophrenia attending the Psychiatry outpatient department of SMS Medical College and Attached Group of Hospitals, Jaipur, from September 2024 to August 2025. The MINI OCD module was used to screen for OCS and Y-BOCS was applied to positive cases. Appropriate descriptive statistics and chi-square testing were used.

Results: OCS were present in 25 of 130 patients (19.2%). Mixed obsessions and compulsions were most frequent (52.0%). Severity was mild in 44.0%, moderate in 36.0%, severe in 16.0%, and extreme in 4.0%. Illness duration greater than five years showed significant association with OCS (p=0.046).

Conclusion: Nearly one-fifth of patients with schizophrenia had OCS. Routine structured screening, especially in patients with longer illness duration, may improve recognition and individualized management.

Keywords: Schizophrenia, obsessive-compulsive symptoms, MINI, Y-BOCS, comorbidity.

INTRODUCTION

Schizophrenia is a chronic and disabling psychiatric disorder characterized by disturbances in thought, perception, emotion, and behaviour. Residual symptoms, impaired functioning, and psychiatric comorbidity continue to influence disability even after psychotic symptoms improve.[1]

Obsessive-compulsive symptoms include intrusive thoughts, urges, or images and repetitive behaviours or mental acts performed to reduce distress. In schizophrenia, obsessions may resemble delusions and compulsions may be confused with stereotyped or disorganized behaviour, making routine recognition difficult.[2]

Careful phenomenological assessment is therefore essential. Obsessions are usually experienced as intrusive and repetitive, whereas delusions are fixed beliefs held with conviction; poor insight can blur this distinction and lead to under-recognition of OCS.[2]

Reported estimates of obsessive-compulsive symptoms in schizophrenia range widely, reflecting differences in diagnostic criteria, assessment thresholds, illness chronicity, and clinical setting. This variability underlines the need for standardized assessment.[3]

Indian studies have shown that OCS are clinically meaningful and should be screened for during psychiatric assessment.[4] Comorbid OCS may be associated with greater symptom burden, cognitive difficulty, poorer psychosocial functioning, and additional treatment complexity.[5]

OCS may precede psychosis, appear during the established illness, or emerge during antipsychotic treatment. This temporal heterogeneity complicates diagnosis and emphasizes the need for careful clinical interviewing rather than assuming that every

repetitive thought or behaviour is psychotic in origin.[6]

The present study was undertaken to determine the burden of OCS and describe the sociodemographic and clinical profile of patients with schizophrenia attending a tertiary-care outpatient service.

MATERIALS AND METHODS

This hospital-based cross-sectional observational study was conducted in the outpatient Department of Psychiatry, SMS Medical College and Attached Group of Hospitals, Jaipur, from September 2024 to August 2025. Adults aged 18-60 years diagnosed with schizophrenia according to DSM-5 criteria and willing to participate were enrolled. Patients with neurological illness, significant head injury, epilepsy, substance use disorder other than nicotine/tobacco use, major medical illness interfering with assessment, or another psychiatric comorbidity interfering with assessment were excluded.[1]

Using an expected OCS prevalence of 18.5%, a 95% confidence level, and 7% absolute precision, the minimum sample size was 123; this was rounded to 130, and convenience sampling was used.[4]

A structured proforma recorded sociodemographic and clinical details. The OCD module of the Mini-International Neuropsychiatric Interview was used for screening, and OCS-positive patients were further evaluated using the Yale-Brown Obsessive Compulsive Scale, which categorizes severity as mild (8-15), moderate (16-23), severe (24-31), and extreme (32-40).[7]

Data were entered in Microsoft Excel and summarized as mean ± standard deviation or frequency and percentage, as appropriate. Pearson's chi-square test was used for categorical associations and a p value <0.05 was considered statistically significant. Institutional Ethics Committee approval was obtained before recruitment, and written informed consent, confidentiality, and the right to withdraw were ensured.[8]

RESULTS

A total of 130 patients with schizophrenia were included. The mean age was 37.1 ± 10.7 years, with the largest proportion in the 31-40-year age group (35.4%). Men constituted 60.0% of the sample. Overall, 47.7% were unmarried, 44.6% were unemployed, and 63.1% resided in urban areas.

Lower-middle socioeconomic status was the most frequent category (40.0%), followed by lower socioeconomic status (35.4%). Primary or middle-level education was reported by 33.8%, while 19.3% had completed graduation or higher education.

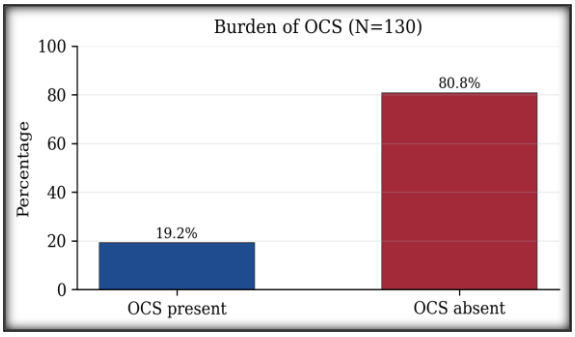

Figure 1: Burden of OCS among participants.

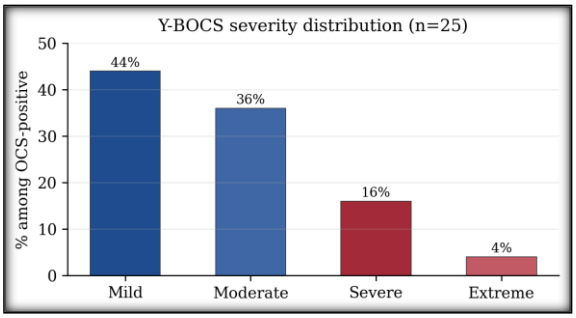

Figure 2: Y-BOCS severity distribution

Table 1: Sociodemographic profile of study participants (N=130)

Variable	Distribution, n (%)
Age group	18-30: 38 (29.2); 31-40: 46 (35.4); 41-50: 28 (21.5); 51-60: 18 (13.9)
Gender	Male: 78 (60.0); Female: 52 (40.0)
Marital status	Unmarried: 62 (47.7); Married: 54 (41.5); Separated/divorced/widowed: 14 (10.8)
Education	Illiterate: 22 (16.9); Primary/middle: 44 (33.8); Secondary: 39 (30.0); Graduate or above: 25 (19.3)
Occupation	Unemployed: 58 (44.6); Unskilled: 36 (27.7); Skilled: 21 (16.2); Professional: 15 (11.5)
Residence	Urban: 82 (63.1); Rural: 48 (36.9)
Socioeconomic status	Lower: 46 (35.4); Lower middle: 52 (40.0); Upper middle: 32 (24.6)

The mean age at onset of schizophrenia was 27.9 ± 7.4 years, and 41.5% developed the illness between 21 and 30 years. The mean duration of illness was 4.8 ± 2.3 years; 46.2% had been ill for more than five years. A continuous course was observed in 60.0% of participants.

Family history of psychiatric illness was present in 29.2%, nicotine or tobacco use in 32.3%, and irregular treatment adherence in 35.4%. Most patients were receiving atypical antipsychotics (78.5%), and 56.9% had at least one previous psychiatric hospitalization.

Table 2: Clinical profile of study participants (N=130)

Variable	Distribution, n (%)
Age at onset	<20 years: 28 (21.5); 21-30 years: 54 (41.5); >30 years: 48 (36.9)
Duration of illness	≤2 years: 29 (22.3); 3-5 years: 41 (31.5); >5 years: 60 (46.2)

Course of illness	Continuous: 78 (60.0); Episodic: 52 (40.0)
Family history	Present: 38 (29.2); Absent: 92 (70.8)
Nicotine/tobacco use	Present: 42 (32.3); Absent: 88 (67.7)
Treatment adherence	Regular: 84 (64.6); Irregular: 46 (35.4)
Medication type	Typical: 28 (21.5); Atypical: 102 (78.5)
Previous hospitalizations	None: 56 (43.1); 1-2: 48 (36.9); >2: 26 (20.0)

Obsessive-Compulsive Symptom Findings

Obsessive-compulsive symptoms were identified in 25 patients, giving an overall burden of 19.2%. Among OCS-positive participants, mixed obsessions and compulsions were the most common clinical presentation (52.0%), followed by obsessions alone (28.0%) and compulsions alone (20.0%).

The mean Y-BOCS total score was 17.9 ± 7.4, with scores ranging from 8 to 36. Mild symptoms were present in 44.0% and moderate symptoms in 36.0%; therefore, four-fifths of OCS-positive patients had mild-to-moderate symptom severity. Severe and extreme symptoms were recorded in 16.0% and 4.0%, respectively.

Table 3: OCS burden, symptom profile, and severity

Parameter	Category	n	%
OCS status	Present	25	19.2
	Absent	105	80.8
Symptom profile (n=25)	Obsessions only	7	28.0
	Compulsions only	5	20.0
	Mixed	13	52.0
Y-BOCS severity (n=25)	Mild	11	44.0
	Moderate	9	36.0
	Severe	4	16.0
	Extreme	1	4.0

Mean Y-BOCS total score among OCS-positive patients: 17.9 ± 7.4 (range 8-36).

Illness duration greater than five years was significantly associated with OCS. Among OCS-positive patients, 64.0% had illness duration greater than five years compared with 41.9% of OCS-negative patients (chi-square=3.97, p=0.046).

OCS were numerically more frequent among patients receiving atypical antipsychotics than among those receiving typical antipsychotics (20.6% versus 14.3% of the respective medication groups), but the association was not statistically significant (p=0.632).

Table 4: Factors associated with obsessive-compulsive symptoms

Factor	OCS present	OCS absent	χ^2	p value
Illness duration >5 years	16 (64.0)	44 (41.9)	3.97	0.046
Illness duration ≤5 years	9 (36.0)	61 (58.1)		
Atypical antipsychotic use	21 (84.0)	81 (77.1)	0.23	0.632
Typical antipsychotic use	4 (16.0)	24 (22.9)		

DISCUSSION

The present study found OCS in 19.2% of patients with schizophrenia. This closely matches the 18.5% prevalence reported by Singh et al. in Indian outpatients with schizophrenia.4 It is higher than the 10% reported by Hemrom et al. in hospitalized patients.[9] It is lower than the approximately one-third reported by Panov and Panova.[10] Differences in setting, illness chronicity, diagnostic thresholds, and assessment instruments probably contribute to the variation between studies.

Mixed obsessions and compulsions formed the most frequent clinical pattern in our study. Most OCS-positive patients had mild or moderate Y-BOCS severity, indicating that clinically relevant symptoms may remain undetected unless structured screening is undertaken. Previous work has shown that OCS in schizophrenia are associated with greater clinical complexity and may adversely affect functioning and quality of life.[11]

Illness duration greater than five years showed a statistically significant association with OCS in our sample. This finding is consistent with longitudinal evidence suggesting that OCS may persist, fluctuate, or emerge during the course of schizophrenia.[12] Greater cumulative illness exposure, repeated treatment changes, and increasing recognition of repetitive symptoms during follow-up may contribute to this relationship.

The association with antipsychotic category was not statistically significant. Although OCS were more frequent among patients receiving atypical antipsychotics, medication-specific dose, duration, and temporal data were not evaluated. Treatment-related OCS remain clinically important, particularly with some second-generation antipsychotics and clozapine exposure.[13]

These findings support routine screening for OCS in schizophrenia, especially in patients with chronic illness, repeated follow-up visits, or unexplained functional impairment. The MINI can improve systematic case detection, while Y-BOCS can

quantify severity and assist in monitoring treatment response.[7]

The findings should be interpreted in the context of a single-centre, cross-sectional design and convenience sampling. The temporal relationship between schizophrenia, medication exposure, and the onset of OCS could not be established, and drug-specific dose and duration effects were not assessed. Nevertheless, standardized diagnostic screening and severity measurement provided a consistent estimate of the clinical burden in this outpatient population.

CONCLUSION

Nearly one-fifth of patients with schizophrenia in this tertiary-care outpatient sample had obsessive-compulsive symptoms. Mixed obsessions and compulsions were the most common presentation, and most OCS-positive patients had mild-to-moderate severity. Longer illness duration was significantly associated with OCS. Early recognition using structured tools may improve individualized treatment planning and help address an often under-recognized dimension of schizophrenia.

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