



STUDY ON OBSESSIVE COMPULSIVE SYMPTOMS IN SCHIZOPHRENIC PATIENTS, PREVALENCE AND CLINICAL RELATIONSHIP AT A TERTIARY HEALTH CARE CENTRE

Dr Rajat Grover^{1*}, Dr Rakesh Yaduvanshi²

^{1*}Junior Resident, Department of Psychiatry, Rajshree Medical Research Institute, Bareilly

²Professor and Head of Department, Department of Psychiatry, Rajshree Medical Research Institute, Bareilly

ABSTRACT

INTRODUCTION: Obsessive–compulsive symptoms (OCS) can co-occur with schizophrenia and may aggravate symptom severity, disability, and quality of life. This study evaluated OCS prevalence and clinical relationships among adults with ICD-10 schizophrenia attending a tertiary-care psychiatry service.

OBJECTIVES: To estimate the proportion of schizophrenia patients with OCS, describe OCS severity patterns, and assess the association of OCS with PANSS scores, WHOQOL-BREF domains, and WHODAS disability.

METHODS: A one-year cross-sectional study in the Psychiatry Department, Rajshree Medical Research Institute, Bareilly enrolled 73 clinically stable consenting adults with ICD-10 schizophrenia. OCS was assessed with Y-BOCS; psychosis severity with PANSS; quality of life with WHOQOL-BREF; disability with WHODAS. SPSS v23; $p < 0.05$.

RESULTS: OCS was present in 27/73 (37.0%). Severity was mild 22.2%, moderate 40.7%, severe 29.6%, extreme 7.4%, with rising PANSS total across categories (78.0 ± 10.2 to 92.0 ± 8.4 ; $p = 0.041$). OCS had higher PANSS total ($p = 0.041$), poorer QoL (physical/psychological/environmental $p < 0.05$), and higher disability ($p = 0.028$).

CONCLUSION: OCS affected over one-third of patients and was associated with greater psychosis burden, poorer quality of life, and higher disability, supporting routine OCS screening and integrated treatment.

KEYWORDS: schizophrenia, obsessive–compulsive symptoms, Y-BOCS, PANSS, WHOQOL-BREF, WHODAS.

INTRODUCTION

Schizophrenia is a severe, chronic psychiatric illness that alters perception, thought, affect, and behaviour, and it often produces long-term disability. Within schizophrenia, obsessive–compulsive symptoms (OCS) also occur in a clinically meaningful subgroup, and the “schizo-obsessive” construct is proposed to describe this overlap [1]. Evidence shows that OCS/OCD is present in a notable minority of patients and is associated with specific clinical correlates, indicating that the comorbidity may not be incidental [2]. OCS is also linked with other symptom dimensions and poorer functioning, making its identification relevant for comprehensive clinical assessment [3]. Recent service-based data continues to show that OCS is common and related to multiple associated factors, supporting the need to study it in diverse clinical settings [4]. Indian tertiary-care observations similarly report OCS among patients with schizophrenia, reinforcing its relevance in routine practice [5]. Comorbid OCD

is associated with distinct clinical features in schizophrenia and may influence overall presentation and outcomes [6]. Data from other tertiary centres also highlight that concurrent OCS is frequently detected and warrants structured evaluation [7]. Findings from different regions show variation in prevalence and associated factors, suggesting that sociocultural and clinical contexts shape the expression and recognition of OCS [8]. Clinical descriptions of schizophrenia with comorbid OCD further support the view that this subgroup can differ in psychopathology and course [9]. Importantly, OCS shows an association with quality of life, underscoring patient-centred implications beyond symptom counts [10]. Therefore, estimating the prevalence of OCS in schizophrenia and examining its clinical relationship in our tertiary health care centre is necessary to guide systematic assessment and inform locally relevant care.

MATERIALS AND METHODS

Study setting: The current study was carried out in the Department of Psychiatry at Rajshree Medical Research Institute, Bareilly, UP

Study design: Cross-sectional study

Place of study: Department of Psychiatry at Rajshree Medical Research Institute, Bareilly, UP

Study period: One Year

Sample size: 73 participants.

Eligibility criteria

Inclusion Criteria:

1. Were clinically diagnosed with schizophrenia according to ICD-10.
2. Were adults aged 18 years and older, providing informed consent.
3. Were clinically stable enough to participate in study assessments.

Exclusion Criteria:

1. Were diagnosed with overlapping psychotic features or disorders like schizoaffective disorder.
2. Had severe neurological disorders or cognitive impairment; had severe, unstable, untreated medical conditions; and were uncooperative.
3. Had active substance abuse or a significant history of substance abuse.
4. Had recently undergone or were currently undergoing treatment altering presentation of OCS or schizophrenia.

Statistical analysis: Data were collected in Excel and analyzed in SPSS v23. Descriptive statistics, t/Mann-Whitney, correlations, regressions, QoL comparisons, survival models, normality checks, imputation; $p < 0.05$.

RESULTS

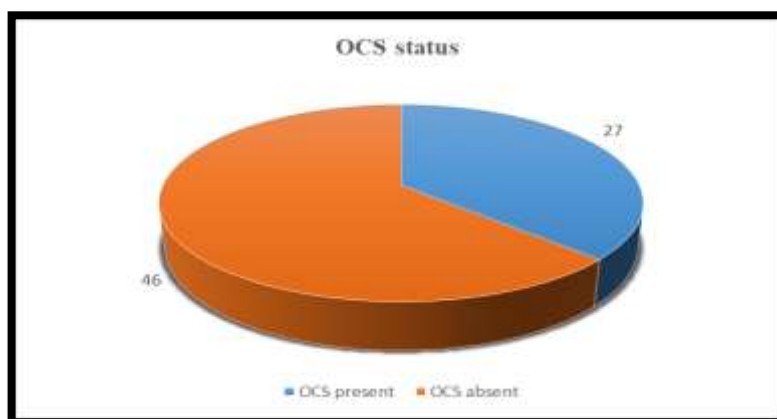


Figure 1: Prevalence of OCS among schizophrenia patients

In Figure 1, among 73 patients with schizophrenia, 27 (37.0%) had obsessive-compulsive symptoms (OCS), while 46 (63.0%) did not.

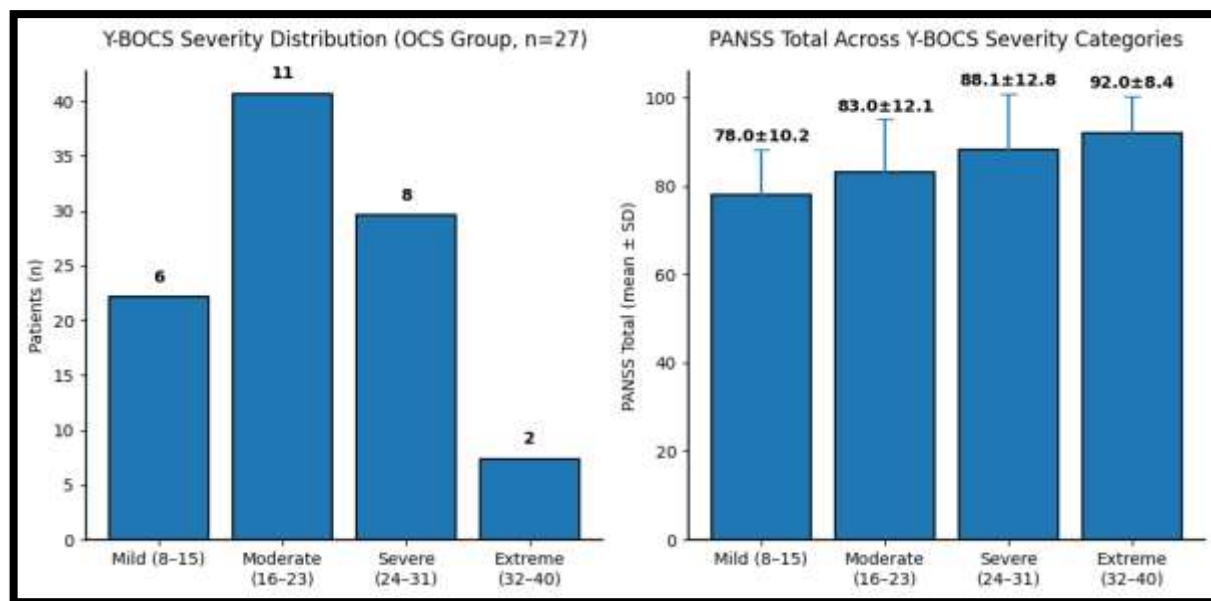


Figure 2: Y-BOCS Severity (OCS Group, n=27) with PANSS Total Across Categories

In Figure 2, among participants with obsessive-compulsive symptoms (OCS), Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) severity classification showed that 22.2% had mild, 40.7% moderate, 29.6% severe, and 7.4% extreme symptom levels. The corresponding mean $\pm$ SD PANSS total scores increased progressively across categories— 78.0 ± 10.2 , 83.0 ± 12.1 , 88.1 ± 12.8 , and 92.0 ± 8.4 , respectively. The difference in PANSS total scores across Y-BOCS severity groups was statistically significant (ANOVA/Kruskal-Wallis $p = 0.041$).

Table 1: PANSS Domain Scores (Mean $\pm$ SD) by OCS Status

Domain	OCS Yes (n=27)	OCS No (n=46)	p-value
Positive	22.0 $\pm$ 4.6	20.3 $\pm$ 5.9	0.12
Negative	21.7 $\pm$ 4.5	20.9 $\pm$ 4.1	0.34
General psychopathology	40.0 $\pm$ 6.9	37.8 $\pm$ 7.5	0.09
PANSS insight item (G12)	3.2 $\pm$ 0.8	2.9 $\pm$ 0.8	0.10
PANSS Total	84.2 $\pm$ 9.9	78.4 $\pm$ 10.2	0.041

Table 1 Shows the comparison of PANSS domain scores showed that participants with obsessive-compulsive symptoms (OCS) had mean $\pm$ SD scores of 22.0 ± 4.6 for positive symptoms, 21.7 ± 4.5 for negative symptoms, and 40.0 ± 6.9 for general psychopathology, while corresponding values in the non-OCS group were 20.3 ± 5.9 , 20.9 ± 4.1 , and 37.8 ± 7.5 . The PANSS insight item (G12) averaged 3.2 ± 0.8 among OCS-positive and 2.9 ± 0.8 among OCS-negative participants. The total PANSS score was significantly higher in the OCS group (84.2 ± 9.9 vs 78.4 ± 10.2 ; $p = 0.041$), indicating a statistically meaningful difference in overall symptom burden.

Table 2: WHOQOL-BREF Domains (0–100; Mean ± SD) by OCS Status

Domain	OCS Yes	OCS No	p-value
Physical	51.3 ± 11.9	58.2 ± 9.5	0.018
Psychological	48.3 ± 11.0	56.4 ± 11.8	0.022
Social	55.2 ± 11.2	59.7 ± 10.8	0.16
Environment	55.1 ± 10.9	59.5 ± 12.4	0.026

In table 2 Assessment of WHOQOL-BREF domain scores showed that participants with obsessive-compulsive symptoms (OCS) had lower mean ± SD scores across most quality-of-life domains—physical 51.3 ± 11.9, psychological 48.3 ± 11.0, social 55.2 ± 11.2, and environmental 55.1 ± 10.9—compared with 58.2 ± 9.5, 56.4 ± 11.8, 59.7 ± 10.8, and 59.5 ± 12.4, respectively, in those without OCS. The differences were statistically significant for the physical ($p = 0.018$), psychological ($p = 0.022$), and environmental ($p = 0.026$) domains, while the social domain difference was not significant ($p = 0.16$).

Table 3: WHODAS Functional Impairment (0–36; Mean ± SD) by OCS Status

Metric	OCS Yes	OCS No	p-value
WHODAS Total	19.9 ± 5.2	16.9 ± 4.3	0.028
Self-care	3.5 ± 1.1	2.9 ± 1.1	0.07
Getting along	4.4 ± 1.2	3.8 ± 1.1	0.09
Participation	5.2 ± 1.5	4.3 ± 1.3	0.047

Table 3 Represent The Evaluation of functional impairment using the WHODAS scale showed higher mean ± SD total scores among participants with obsessive-compulsive symptoms (OCS) compared with those without (19.9 ± 5.2 vs 16.9 ± 4.3; $p = 0.028$). Domain-wise comparison revealed slightly greater impairment in self-care (3.5 ± 1.1 vs 2.9 ± 1.1; $p = 0.07$) and getting along (4.4 ± 1.2 vs 3.8 ± 1.1; $p = 0.09$), with a statistically significant difference observed in participation restriction (5.2 ± 1.5 vs 4.3 ± 1.3; $p = 0.047$).

DISCUSSION

In this cross-sectional sample of 73 adults with ICD-10 schizophrenia, obsessive-compulsive symptoms (OCS) were present in 27 patients (37.0%), indicating a clinically substantial comorbid symptom load. This frequency is consistent with evidence that OCS/OCD commonly co-occurs with schizophrenia-spectrum illness: Robins et al. (2022) ^[11] recorded OCS in 24.0% (5,179/22,551) and OCD in 11.9% (2,574/22,551), and Awasthi & Satapthy (2023) ^[12] found OCS in 21.2% (18/85) using Y-BOCS ≥8; the higher proportion here likely reflects differences in sampling and symptom ascertainment. Within the OCS group, severity mapping on Y-BOCS showed 22.2% mild, 40.7% moderate, 29.6% severe and 7.4% extreme, with a parallel rise in PANSS total from 78.0±10.2 to 92.0±8.4 across strata ($p=0.041$), supporting a dose-response link between OCS intensity and psychosis burden; this aligns with the positive association between Y-BOCS and PANSS reported by Awasthi & Satapthy (2023) ^[12] ($r=0.65$; $p<0.001$). Consistently, OCS-positive participants had higher PANSS total than OCS-negative (84.2±9.9 vs 78.4±10.2; $p=0.041$), reflecting greater psychopathology. Positive, negative and general psychopathology domain means were also higher,

with insight $G12\ 3.2\pm0.8$ vs 2.9 ± 0.8 . This is concordant with severe clinical profiles noted in routine-care data by Robins et al. (2022) ^[11] (e.g., hallucinations/delusions OR 1.11) and with the higher psychopathology and poorer functioning described in Bener et al. (2018) ^[9] (all $p<0.001$). Quality of life was poorer with OCS in our cohort, with lower WHOQOL-BREF physical, psychological and environmental scores ($p=0.018$, 0.022 , 0.026) but a non-significant social difference ($p=0.16$); this pattern is directionally similar to the negative associations between OCS burden and WHOQoL-Bref reported by Akinsulore et al. (2018) ^[10]. Functional disability also tracked OCS status: WHODAS total was higher (19.9 ± 5.2 vs 16.9 ± 4.3 ; $p=0.028$) and participation restriction differed significantly ($p=0.047$), while self-care and getting along showed near-significant trends ($p=0.07$, 0.09), representing nuanced domain effects not directly quantified in the comparator reports.

CONCLUSION

This cross-sectional study of 73 clinically stable adults with ICD-10 schizophrenia, obsessive-compulsive symptoms were present in 27 patients, giving a prevalence of 37.0%. Severity profiling among OCS-positive participants showed a predominance of moderate symptoms (40.7%), followed by severe (29.6%), mild (22.2%) and extreme (7.4%), with a significant stepwise rise in PANSS total scores from 78.0 ± 10.2 to 92.0 ± 8.4 across Y-BOCS categories ($p=0.041$). Compared with those without OCS, the OCS group had a higher overall PANSS burden (84.2 ± 9.9 vs 78.4 ± 10.2 ; $p=0.041$), indicating clinically meaningful amplification of psychotic symptomatology. OCS was also associated with poorer quality of life, with significantly lower WHOQOL-BREF physical, psychological and environmental domain scores ($p=0.018$, 0.022 , 0.026), and greater functional disability on WHODAS (19.9 ± 5.2 vs 16.9 ± 4.3 ; $p=0.028$), particularly participation restriction ($p=0.047$). These findings support routine OCS screening using Y-BOCS in schizophrenia clinics and targeting both OCS and psychosis to improve functioning and patient-reported outcomes in routine care overall.

Conflict of Interest: None.

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Ethical Approval: Obtained.

Consent: Written consent secured.

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