

## A Comparative Cross-Sectional Study of Suicidal Intent in Obsessive-Compulsive Disorder and Schizophrenia

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### Abstract

**Introduction:** India reported significant rise of suicide rate. Obsessive compulsive Disorder (OCD), with high treatment non-response rates contributed to heightened suicide risks. Schizophrenia also shows high suicide rate, with nearly 50% of patients attempting suicide. Therefore, this study aimed to find out prevalence of suicidal intent and association of other variables among patients of OCD and schizophrenia.

**Materials and Methods:** This cross-sectional study included 60 patients diagnosed with obsessive-compulsive disorder or schizophrenia. Participants were assessed for socio-demographic details, symptom

severity, and suicidal ideation using Scale for the Assessment of Positive Symptoms, Scale for the Assessment of Negative Symptoms, Yale Brown Obsessive-Compulsive Scale, and Scale for Suicide Ideation. This study examined suicide attempts and intent in both groups. Descriptive and inferential statistical analysis was done.

**Results:** The study included 60 patients with schizophrenia or OCD, showing a male predominance (M: F = 1.5:1). Overall, 38.33% had attempted suicide, with slightly higher rates in schizophrenia (39.47%) than OCD (36.36%) ( $p > 0.05$ ). Schizophrenia patients had higher mean SSI scores (28.34 vs. 19.12,  $p = 0.004$ ).

Suicide risk was greater among females ( $p = 0.0027$ ), divorced/unmarried individuals ( $p = 0.0002$ ), and with increasing age ( $r = 0.842$ ), while higher education ( $r = -0.724$ ) and socioeconomic status ( $r = -0.638$ ) were protective.

**Conclusion:** Schizophrenia patients showed higher suicide attempts and intent than those with OCD. Major risk factors included female gender, unmarried status, severe OCD, older age, lower education, and poor socioeconomic status. Early detection and targeted intervention are vital to reduce suicide risk.

**Keywords:** Schizophrenia, Obsessive compulsive disorder, Suicidal intent, Risk factors.

## Introduction

Suicide continues to cast a shadow over global health, claiming close to one million lives each year. As per the National Crime Records Bureau (NCRB) report released in August 2022, India recorded 1,64,033 suicides in 2021, rise approx. 7.2% from 2020. The suicide rate is 12 /lakh population, 6.2% increase compared to the previous year.<sup>1</sup> Psychiatric illness like major mood disorders, obsessive-compulsive disorder (OCD), schizophrenia, and substance use disorders, are the silent tormentors fueling suicidal intent, contributing to over 90% of suicides. Suicide risk is higher when more than one psychiatric illness coexists.<sup>2</sup>

Obsessive-compulsive disorder characterized by recurrent distressing obsessions and/or compulsions that interfere with daily functioning. It follows a chronic course, causing significant distress, disability, social and occupational disruption, and has a high treatment non-response rate.<sup>3</sup> The risk factors for suicidal tendencies in OCD have been less studied than in other anxiety disorders. Earlier, it was thought that OCD was associated with low suicide risk. Recent systematic

reviews done by Angelakis et al. show that OCD carries a higher suicide risk than the general population, highlighting important treatment implications.<sup>4</sup>

In contrast to OCD, schizophrenia is a chronic illness with remissions and exacerbations, reducing life expectancy by about 10 years, suicide is the most devastating possible outcome of a schizophrenia and leading cause of premature death.<sup>5</sup> Suicide attempts in schizophrenia are serious and often require medical attention along with other risk factors including chronic illness, poor treatment response, caregiver burden, hopelessness, and social isolation. Suicide attempts are often repeated, with higher lethality and completion rates.<sup>6</sup> Suicidality in schizophrenia is well-studied, with nearly 50% of patients attempting suicide in their lifetime and completed suicide rates of 9–12.9%. About 1–2% complete suicide within a year of an attempt, with an additional 1% each subsequent year.<sup>7</sup>

OCD and Schizophrenia are the hidden agonies of suicidal intent. Suicidal tendencies in OCD and schizophrenia have been studied separately in India and globally, only few studies compared neurotic and psychotic disorders. This study aims to address that gap, to find out prevalence of suicidal intent and association with independent variables among patients diagnosed with obsessive-compulsive disorder (OCD) and Schizophrenia.

## Methodology

A Cross-sectional study conducted at a tertiary health care center for a period of 01 year. In this study patients with OCD or schizophrenia, diagnosed as per ICD-10 criteria, along with more than 18 years of age, both genders who gave written informed consent were included. Patients who had co-morbid substance-use disorder or any other organic condition were excluded

from this study. The sample size was determined based on pilot study done on the topic of suicidal tendencies in psychiatric disorders. Assuming 90% power and a 95% confidence interval, the estimated sample size was approximately 60. Hence, 60 patients diagnosed with OCD or schizophrenia within 01 year of this study were included.

Institutional ethical committee approved the study, and an informed and written consent was obtained from all the participants or the caregivers. The patients were assessed for demographic details, symptomatology and suicidal ideation with the help of following tools:

1. **Socio-Demographic Data:** It includes gender, age, religion, education, marital status, income, occupation, and family type. Socioeconomic status was assessed using the Modified B. G. Prasad Scale<sup>8</sup>.
2. **SAPS (Scale for the Assessment of Positive Symptoms) and SANS (Scale for the Assessment of Negative Symptoms)**<sup>9</sup>: These scales assess positive and negative symptoms, primarily in schizophrenia. Both are widely validated and reliable. The SAPS have 35 items across 5 domains: Hallucinations, Delusions, Bizarre Behaviour, Positive Formal Thought Disorder, and Inappropriate Affect. The SANS has 24 items across 5 domains: Affective Flattening, Alogia, Avolition-Apathy, Anhedonia-Asociality, and Attention. Items on both scales are scored from 0 (none) to 5 (severe).
3. **YBOCS (Yale Brown Obsessive Compulsive Scale)**<sup>10</sup>: It is widely used clinical tool for assessing the severity of obsessive-compulsive symptoms. It is 10-item severity scale, total scores range from 0–40: 0–7 (subclinical), 8–15 (mild), 16–23 (moderate), 24–31 (severe), and 32–40 (extreme).

Separate subscale scores for obsessions and compulsions range from 0–20.

4. **Scale for suicidal ideation (SSI)**<sup>11</sup>: This is a 19-item tool that assesses suicidal intent. It is developed from clinical observation and systematic interviews of suicidal patients, capturing their main preoccupations, concerns, wishes, and behavioral patterns.

A detailed history was taken with respect to the duration of OCD and schizophrenia and their treatment. The frequency of suicide attempts and suicidal intent in each patient were also assessed. Data collected was entered and analysed using IBM SPSS statistics 21.0 software. Data management tools were utilized to avoid duplication and entry error. Data was analysed using descriptive statistics and Inferential statistics. The variables were documented in terms of frequency and proportion along with paired t-test /Chi-square test. A p-value of less than 0.05 was considered statistically significant.

## Results

Among the 60 patients, 36 (60%) were male and 24 (40%) were females, with a male-to-female ratio of 1.5:1. Most patients were 31–40 years age group (36.67%). The mean age was  $37.82 \pm 9.77$  years. The majority (68.33%) were married. Maximum patients were 66.67% from rural areas and 66.67% belonged to joint families. Most patients had secondary education (33.33%) and belonged to the middle class (33.33%). (Table 1)

Among 60 patients, 38 had schizophrenia, while 22 were diagnosed with OCD, showing higher prevalence of schizophrenia. Among patients with schizophrenia, 15 of 38 (39.47%) had attempted suicide, compared to 8 of 22 (36.36%) with OCD. Overall, 23 of 60 patients (38.33%)

had attempted suicide. Although suicide attempts were slightly more common in schizophrenia, the difference was not statistically significant. Analysis of suicide attempts using SSI (Suicidal Severity Index) scores showed that patients with schizophrenia had significantly higher suicidal intent than those with OCD. Among the 15 schizophrenia patients who attempted suicide, the mean SSI score was  $28.34 \pm 7.84$ , compared to  $19.12 \pm 5.68$  in the 8 OCD patients. The difference in severity was statistically significant ( $P = 0.004$ ). (Table 2)

Analysis of SAPS (Scale for the Assessment of Positive Symptoms) and SANS (Scale for the Assessment of Negative Symptoms) scores in schizophrenia patients showed two symptom patterns. Among 38 patients, 22 (57.89%) had predominantly positive symptoms with a mean SAPS score of  $74.68 \pm 28.12$ , while 16 (42.11%) shows predominantly negative symptoms with a mean SANS score of  $46.48 \pm 19.16$ . The severity of OCD was assessed using the Y-BOCS. Among 22 patients, 36.36 % had mild OCD, 31.82% had moderate OCD, 18.18% had severe OCD and 13.64% had extreme OCD.

Analysis of suicidal intent showed significant associations with following factors. Females and individuals without a spouse (unmarried, separated, or divorced) had higher rates of suicide attempts ( $p < 0.05$ ). Age and OCD severity (Y-BOCS score) were positively correlated with suicidal severity, while higher education and better socioeconomic status were associated with lower SSI scores. (Table 3).

## Discussion

Schizophrenia and Obsessive-Compulsive Disorder (OCD) both are distinct yet profoundly disabling psychiatric disorders. Schizophrenia, a chronic and severe mental illness marked by delusions,

hallucinations, and disorganized thought, blurs the boundary between reality and perception, often emerging in early adulthood and demanding lifelong antipsychotic and psychosocial care. In contrast, OCD is defined by intrusive obsessions and compulsive rituals aimed at easing anxiety. Though both conditions disrupt daily functioning, OCD generally responds better to cognitive-behavioral therapy and SSRIs. Despite their chronic nature, timely and sustained management can significantly enhance the quality of life for affected individuals.<sup>12</sup>

A meta-analysis conducted by Emily J. Fawcett et al (2022)<sup>13</sup>, reported higher OCD prevalence 1.5 times more in women than men. Similarly, in present study females are affected more than man. This discrepancy can be because of the less female participants were included in the study in comparison to male, that shows the health seeking behaviour of the society towards mental health and women's.

A study by Anita Riecher-Rössler et al. (2018)<sup>14</sup> found that schizophrenia incidence was higher in males than females. Male predominance in cases of schizophrenia was like this study.

Number of Suicide attempts and severity of suicidal intent are significantly higher in patients with schizophrenia compared to those with OCD as indicated by elevated scores on suicide severity assessments. Study done by Chaudhary RK et al (2016)<sup>15</sup> contradict this statement that suicidal intent is more common in OCD. The greater suicidal risk in schizophrenia reflects its severe symptoms and psychosocial challenges. Factors like gender, marital status, and illness severity further influence suicidal behavior, highlighting the need for targeted interventions in high-risk groups.<sup>16</sup> In this present study, 15 of 38 schizophrenia patients (39.47%)

and 8 of 22 OCD patients (36.36%) had attempted suicide which suggested that schizophrenia patients were more likely to attempt suicide. A meta-analysis done by Luca Pellegrini et al. (2021)<sup>17</sup> concludes that Obsessive-Compulsive and Related Disorders (OCRDs) was more associated with suicidality and body dysmorphic disorder (BDD) was at greatest risk of suicidal ideation. While Sher L et al (2019)<sup>18</sup> done an overview and concluded that suicide attempt rate in schizophrenia patients is only 10% which is discordant with findings of this study.

In this present study, females and individuals living without a spouse (unmarried, separated, or divorced) showed significantly higher rates of suicide attempts. Suicidal intent positively correlated with age and OCD severity, while higher education and better socioeconomic status were associated with lower SSI scores. Similar predictors of suicide attempts in OCD and schizophrenia have been reported by Agne NA et al.<sup>19</sup> and Ayalew M. et al<sup>20</sup>, respectively.

### Conclusion

Patients with schizophrenia had a higher rate of suicide attempts and more severe suicidal intent compared to those with OCD. Females, unmarried individuals, and those with more severe form of OCD were at greater risk. Increasing age, lower educational levels, and poorer socioeconomic status were linked to higher suicidal intent. It is crucial to identify these risk factors associated with suicidal ideation in OCD and schizophrenia to implement effective preventive strategies and reduce suicide risks in these populations.

### Limitations of the study

This study has some limitations also in the form of small sample size hence findings may not be generalized to entire population. Being a cross-sectional study,

causality can't be established. Confounding was difficult to control since data was collected only once. Therefore, further studies are needed to find out risk factors and causality of suicide in psychiatric illness.

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### Legend Tables

Table 1: Sociodemographic details of studied cases

Sociodemographic Details		No.(n=60)	%
Age group	18-30 years	14	23.33%
	31-40 years	22	36.67%
	41-50 years	18	30%
	51-60 years	6	10%

Marital Status	Married	41	68.33%
	Unmarried	9	15%
	Divorced/Separated	10	16.67%
Type of family	Joint	40	66.67%
	Nuclear	20	33.33%
Educational status	Illiterate/ just literate	5	8.33%
	Primary school	12	20%
	Secondary school	20	33.33%
	Higher Secondary school	15	25%
	Graduate and above	8	13.33%
Residential Area	Rural	40	66.67%
	Urban	20	33.33%
Socio-economic status	Upper	5	8.33%
	Upper Middle	15	25%
	Middle	20	33.33%
	Lower Middle	10	16.67%
	Lower	10	16.67%

Table 2: Distribution of cases based on schizophrenia and obsessive-compulsive disorder (OCD)

Psychiatric Disorders	History of Suicide attempt in patient (N)	Percentage	Mean SSI Score (SD)	P value
Schizophrenia (N=38)	15	39.47 %	28.34 (7.84)	0.004
OCD (N=22)	8	36.36 %	19.12 (5.68)	

Table 3: Suicidal intent/ideation and its correlation with various variable factors

Variable Factors	Suicide attempts in past (N)	P-value
Male(n=36)	8	0.0027
Female(n=24)	15	
Married(n=41)	9	0.0002
Divorced/unmarried/separated(n=19)	9	
Variable Factors	r*	Correlation*
Age	+0.842	(+)
Educational status	-0.724	(-)
Socioeconomic status	-0.638	(-)
OCD severity	+0.812	(+)

\* Pearson's correlation coefficient=r, Positive correlation= (+), Negative correlation= (-)