E-ISSN 2250-0944
ISSN 2250-1150
doi: 10.31838/ijprt/15.01.235

Research Article

Comparison of Depression, Anxiety, Stress, and Quality of Life among Primary Caregivers of Patients with Obsessive-Compulsive Disorder and Schizophrenia

Dr Gurpreet Kaur[1*], Dr Rohit Garg[2], Dr Gurpreet Singh Maan[3]
[1]Senior Resident, Department of Psychiatry, Government Medical College, Patiala.
[2]Professor, Department of Psychiatry, Government Medical College, Patiala.
[3]Junior Resident, Department of Plastic Surgery, SS Institute of Medical Sciences, Davangere.
Corresponding author: *Dr Gurpreet Kaur
Senior Resident, Department of Psychiatry, Government Medical College, Patiala.
Email: gurpreet.randhawa10@gmail.com
Received: 11.04.25, Revised: 26.05.25, Accepted: 09.06.25

ABSTRACT
Background: Family caregivers often experience significant stress due to their multiple roles in caring for persons with mental illness. They experience a decline in quality, exacerbated by the prolonged and severe nature of the illness.
Material and methods: The study aimed to assess and compare the levels of depression, anxiety, stress, and quality of life among caregivers of OCD and Schizophrenia patients, and the impact of illness severity on these parameters. It included 50 consecutive OCD and schizophrenia patients and their primary caregivers. Data were collected using the sociodemographic Performa, Y-BOCS, PANSS, DASS-21 scale, and WHOQoL-Bref. The collected data will be analyzed using standard statistical methods.
Results: This study found that caregivers of schizophrenia patients had a depression score of 23.84±5.68, an anxiety score of 10.60±3.70, and a stress score of 22.12±5.84. In contrast, caregivers of OCD patients had a depression score of 12.76±5.92, an anxiety score of 20.48±8.36, and a stress score of 16.24±8.12.
Conclusion: Caregivers of schizophrenia patients experience higher depression, stress, and lower health satisfaction compared to caregivers of OCD patients, who mainly report anxiety. For OCD caregivers, these mental health issues worsen with illness severity, affecting their quality of life, particularly in physical health. Those caring for schizophrenia patients with positive symptoms face greater mental health challenges and a significantly poorer quality of life than those caring for patients with negative symptoms.

Keywords: Schizophrenia, OCD, Caregivers, Depression, Anxiety, Stress, Quality of life

INTRODUCTION

Schizophrenia and Obsessive-Compulsive Disorder (OCD) significantly impact patients and caregivers, leading to psychological distress, reduced social interactions, and diminished quality of life. Caregivers often face heightened anxiety and depression, particularly in those caring for schizophrenia patients, with marked declines in quality of life across various domains. [1-5] Families of OCD patients also experience isolation and strained relationships. [6-8] Research indicates that caregivers' psychological distress can be twice as high compared to the general population. [9-11] This study aims to explore the impact of depression, anxiety, and stress on the quality of life among caregivers of patients with schizophrenia and OCD.

MATERIALS AND METHODS

The study was conducted among primary caregivers of 50 patients with OCD and schizophrenia, each at the outpatient and inpatient Department of Psychiatry, from February 2020 till completion of data collection after receiving approval from the Institutional Ethics Committee (14410/D-26/2019).

Sample Size Collection:

The sample size was estimated, and the two independent groups to be compared were equal size n, and to be drawn from the population. The sample size has been calculated by using the formula [12]:

$n=(r+1)/r\ SD^2 \times (Z\beta - Z\alpha)^2/(d)^2$

n = Sample size; r=1; (r+1)/r=2; SD=0.2; Zβ=0.84; Zα = 1.96; d=0.25

A minimum of 50.176 = 50 samples is required for each group in the study.

Inclusion Criteria:
Patients of any gender, aged 18-60, diagnosed with Schizophrenia and OCD (ICD-10 criteria) with illness duration of at least 1 year. Caregivers over 18 years of age have lived with the patient for at least 3 years and are willing to provide written informed consent.

Exclusion Criteria: Co-existing medical or neurological illnesses.
After ensuring that the participants fulfilled the inclusion and exclusion criteria, the following tools were applied:
Tools:
Socio-demographic Proforma: A semi-structured proforma recorded the age, gender, education, locality, occupation, and duration of illness.
Depression, Anxiety, and Stress Scale (DASS-21) [13]- Depression, Anxiety, and Stress Scale-21 items (DASS-21) is a set of three self-report scales designed to measure the emotional states of depression, anxiety, and stress. Each of the three DASS-21 scales contains 7 items, which are divided into sub-scales with similar content.
The Yale-Brown Obsessive Compulsive Scale (YBOCS) [14] measures the severity of obsessive-compulsive disorder (OCD) symptoms, independent of the type of obsessions or compulsions. This clinician-rated scale consists of 10 items, scored from 0 (no symptoms) to 4 (extreme symptoms), with a total score range of 0 to 40. It also includes separate subtotals for obsessions and compulsions severity.
The Positive and Negative Syndrome Scale (PANSS) [15] is a widely used tool for assessing the severity of symptoms in schizophrenia. Created in 1987 by Stanley Kay, Abraham Fiszbein, and Lewis Opler, it is considered the "gold standard" for evaluating psychotic disorders and the effectiveness of antipsychotic treatments. The PANSS measures both positive symptoms, such as hallucinations and delusions, and negative symptoms, which reflect a loss of normal functioning. Patients are rated from 1 to 7 on 30 symptoms, based on interviews and reports from family or caregivers. The assessment includes 7 items for both the positive and negative scales and 16 items for general psychopathology.
The WHOQOL-BREF [16] is a 26-item questionnaire used in various studies to assess health perceptions and quality of life. It shows good to excellent reliability and validity. The tool includes four domains: Physical Health, Psychological Well-being, Social Relationships, and Environment, with each domain containing multiple questions that contribute to its score. It also features two standalone questions on overall quality of life and health satisfaction.

Statistical analysis: Statistical analysis was done using SPSS (version 27). The level of statistical significance was set at P≤0.05. Students't-tests and Chi-square tests were used to analyse the data.

Ethical Consideration: the institutional Ethics Committee gave ethical clearance for the survey before data collection. The Indian Medical Council of Medical Research guidelines for biomedical research in human subjects and the code of ethics of the World Medical Association (Declaration of Helsinki) were followed as applicable. The survey form included acknowledgment for maintaining confidentiality and consent for participation.

RESULTS
In the study, a total of 100 patients with schizophrenia and OCD, along with their caregivers (50 each), who fulfilled inclusion and exclusion criteria were included. Table 1 shows the distribution of patients and their caregivers based on their sociodemographic profiles.

Table 1. Sociodemographic profile of both patients and their caregivers

CATEGORY	VARIABLE	FREQUENCY				*P* Value
PATIENTS						
		Schizophrenia (Group 1)		OCD(Group 2)		
		N	%age	N	%age	
	18-27	10	20.0%	9	18.0%	
	28-37	12	24.0%	9	18.0%	
	38-47	6	12.0%	12	24.0%	
	48-57	12	24.0%	10	20.0%	
	58-67	6	12.0%	7	14.0%	0.552
	68-77	2	4.0%	3	6.0%	

Age Group	>77yrs	2	4.0%	0	.0%	
Gender	Male	37	74%	41	82%	0.47
	Female	13	26%	09	18%	
Duration of illness	≤5	3	6%	8	16%	0.008
	6-10	12	24%	8	16%	
	11-15	9	18%	0	0%	
	16-20	15	30%	13	26%	
	21-25	6	12%	13	26%	
	>25	5	10%	8	16%	
CAREGIVERS						
		Schizophrenia		OCD		
		N	% age	N	%age	*P* value
Age Group	18-27	2	4 %	4	8 %	0.461
	28-37	5	10 %	5	10 %	
	38-47	14	28 %	20	40 %	
	48-57	16	32 %	15	30 %	
	58-67	12	24 %	5	10 %	
	68-77	1	2 %	1	2 %	
Gender	Male	16	32 %	13	26 %	1.00
	Female	34	68 %	37	74 %	
Income	<5000	20	40 %	11	22 5	0.142
	5000-10000	18	36 %	25	50 %	
	>10000	12	24 %	14	28 %	
Religion	Sikh	24	48 %	23	46%	0.240
	Hindu	23	46 %	26	52 %	
	Others	3	6%	1	2 %	
Region	Urban	23	46 %	12	24 %	0.035
	Rural	27	54 %	38	76%	
Occupation	Unemployed	5	10 %	2	4 %	0.46
	Employed	8	16 %	9	18 %	
	Self-Employed	2	4 %	0	0 %	
	Student	1	2 %	3	6 %	
	Housewife	28	56 %	31	62 %	
	Ohers	6	12 %	5	10 %	
Education	Illiterate	6	12%	1	2%	0.36
	Can read and write	1	2%	2	4%	
	Primary/ up to 5th	26	52%	23	46%	
	Middle/ up to 8th	7	14%	7	14%	
	Higher sec 10/12	6	12%	9	18%	
	Graduate	4	8%	7	14%	
	Postgraduate	0	0%	1	2%	
Relation	Brother	2	4 %	2	4 %	0.375
	Daughter in law	1	2 %	2	4 %	
	Father	2	4 %	2	4 %	
	Husband	8	16 %	4	8 %	
	Mother	13	26 %	7	14 %	

	Sister	1	2 %	0	0 %	
	Son	4	8 %	5	10 %	
	Wife	19	38 %	28	56 %	

(*** indicates that a significant difference exists between the parameters)

As seen in Table 1, in both groups, male predominance was observed, with 37 (74%) males in the Schizophrenia group (group 1) and 41 (82%) in the OCD group (group 2). In group 1, most of the patients belonged to the age group 28-37 years and 48-57 years (12 [24%] each). In group 2, most patients were from the age group 38-47 years (N=12, 24%) and 48-57 years (N=10, 20%). In the schizophrenia group, the duration of illness was maximum (16-20 years) in 15 (30%) subjects followed by 6-10 years (N=12, 24%) In the OCD group, the duration of illness was maximum of 16-20 years & 21-25 years (13 [26%] each).

In group 2, most patients were in YBOC category 3 (moderately severe, N=34, 68%), followed by category 2 (moderate, N=15, 30%), and category 4 (severe, N=1, 2%). In group 1, 40 (80%) exhibited positive symptoms, while 10 (20%) showed negative symptoms.

Among Caregivers, both groups exhibited a female predominance, with the majority being housewives (N=28, 56% and N=31, 62%). Additionally, 26 (52%) and 23 (46%) of them had education limited to the primary level (5th grade). In terms of relationships, a majority of participants were wives and mothers, with N= 19 (38%) and 13 (26%) in group 1 and N= 28 (56%) and 7 (14%) in group 2, respectively.

There was no significant difference in the sociodemographic profile of patients and caregivers among the groups.

Table 2. Comparison of various parameters between two groups (Schizophrenia and OCD caregivers):

Parameter	**Schizophrenia (50) (Group 1)**		**OCD (50) (Group 2)**		
	Mean	Std. Deviatic	Mean	Std. Deviation	p-value
Final D score	23.84	5.683	12.76	5.923	0.00***
Final A score	10.60	3.709	20.48	8.365	0.00***
Final S score	22.12	5.847	16.24	8.128	0.00***
WHO QoL Domain 1 score	33.86	10.761	44.90	10.332	0.00***
WHO QoL Domain 2 score	34.86	10.797	44.18	9.705	0.00***
WHO QoL Domain 3 score	21.12	17.998	34.94	10.901	0.00***
WHO QoL Domain 4 score	24.56	15.666	38.44	12.518	0.00***

(*** indicates that a significant difference exists between the parameters)

Table 2 presents a comparison of depression, anxiety, and stress scores, as well as quality of life, among caregivers of patients with schizophrenia and those with OCD. Caregivers of schizophrenia patients experience significantly higher levels of depression and stress, while caregivers of OCD patients report higher anxiety levels. Additionally, caregivers of schizophrenia have a lower quality of life in terms of satisfaction with physical health, psychological health, social relationships, and environmental conditions compared to those caring for OCD patients. Furthermore, the findings reveal that as depression, anxiety, and stress scores increase, quality of life tends to decrease. The quality of life is better for caregivers of OCD patients than for caregivers of those with schizophrenia.

Table 3 Comparison of various parameters between two groups (Schizophrenia and OCD caregivers) as per the severity of illness:

Variable	**SCHIZOPHRENIA (50) (Group 1)**	**OCD (50) (Group 2)**

	Severity (PANSS)			Severity (YBOCS)			
	Positive symptom (40)	Negative symptom (10)	P value	Moderate (15)	Moderately severe (34)	Severe (1)	P value
Final D Score	25.20± 5.39	18.40± 2.95	0.00***	8.00± 2.50	14.71± 5.86	18.00± 0.00	0.00***
Final A Score	11.35±3.69	7.60± 1.83	0.003***	13.87± 3.15	23.06± 8.30	32.00± 0.00	0.00***
Final S Score	23.65± 5.35	16.00± 3.12	0.00***	9.87± 2.66	18.71± 8.13	28.00± 0.00	0.00***
Domain 1 score	32.32± 11.38	40.40± 3.09	0.03	50.80± 4.45	42.71± 11.11	31.00± 0.00	0.013***
Domain 2 score	32.58± 10.94	44.00± 0.00	0.002***	47.07± 9.27	43.09± 9.85	38.00± 0.00	0.346
Domain 3 score	17.35± 17.99	36.20± 6.71	0.002***	38.87± 7.71	33.68± 11.61	19.00± 0.00	0.102
Domain 4 score	19.70± 13.68	44.00± 0.00	0.00***	47.80± 8.79	34.88± 11.64	19.00± 0.00	0.00***

(*** indicates that a significant difference exists between the parameters)

Table 3 indicates that levels of depression, anxiety, and stress increased with the severity of the illness. Caregivers of patients with severe OCD exhibited higher scores for depression, anxiety, and stress compared to those with moderately severe and moderate OCD. Additionally, the quality of life of caregivers diminished as the severity of OCD symptoms increased. Specifically, satisfaction with physical health and satisfaction with the environment worsened alongside the progression of the disease in their patients. In group 1 group, according to PANSS, caregivers of patients with positive symptoms of schizophrenia showed higher scores for depression, anxiety, and stress compared to those caring for patients with negative symptoms of schizophrenia. The quality of life for these caregivers was also poorer. This decline in quality of life was evident in satisfaction related to psychological health, social relationships, and the environment, all of which deteriorated further with rising scores of depressions, anxiety, and stress among caregivers of patients with positive symptoms compared to those caring for patients with negative symptoms.

DISCUSSION

The current study compared the impact of severity of illness on depression, anxiety, stress, and quality of life among caregivers of patients with schizophrenia and OCD by using sound methodology, stringent inclusion and exclusion criteria, and standardized rating scales.

The majority of patients in both groups were males. The mean duration of illness was 14.30 ±7.20 years for schizophrenia patients and 15.40±8.54 years for those with OCD. This could be explained by the fact that both illnesses are chronic and more common in males, which is consistent with various studies. [17-19]

Among Caregivers, female predominance is seen, with the majority being housewives and education limited to primary level (5th grade). In terms of relationships, most of them were wives and mothers. This could be explained by the fact that most of the patients, in this study were males and the sociocultural expectations imposed on females to adopt a caregiving role. These findings are consistent with other studies. [9,17,20] Most of them were Sikhs and belonged to rural areas, which is understandable due to the demography of Punjab and the rural catchment area of the hospital.

The present study shows higher depression and stress among caregivers of individuals with schizophrenia, but higher anxiety among caregivers of OCD patients. A possible explanation for higher depression and stress can be that schizophrenia patients often struggle with insight and treatment engagement, making care difficult, whereas OCD patients may hide their symptoms and attempt to cope independently, leading to a need for schizophrenia patients to rely on caregivers for medication and daily routines. More anxiety in OCD caregivers may be due to time-consuming and disruptive rituals which often impair activities of daily living.

Furthermore, anxiety and insomnia were more frequently reported by caregivers of the OCD group, while depression, somatic symptoms, and social dysfunction were more prevalent among caregivers of individuals with schizophrenia. [17]

Additionally, caregivers of those with schizophrenia reported lower satisfaction levels in physical health, psychological health, social relationships, and environmental health compared to caregivers of OCD patients. The stigma associated with schizophrenia in society leads to withdrawal from social interactions, leisure activities, and a sense of isolation, ultimately resulting in a poor quality of life. [4]

Previous research has indicated that caregivers of schizophrenia patients experience significantly poorer quality of life compared to those caring for OCD patients. [17]

Among caregivers of OCD patients, depression, anxiety, and stress increased with the severity of the illness, and quality of life reduced with increasing severity, especially in satisfaction with physical health and environment. A previous study also noted a negative correlation between the severity of OCD and caregivers' quality of life (QOL) across social, general, and environmental domains, as well as a negative correlation with their overall QOL. [21]

In the schizophrenia group, caregivers of individuals with positive symptoms of schizophrenia experience higher depression, anxiety, and stress compared to those caring for individuals with negative symptoms of schizophrenia. The quality of life for caregivers of patients with positive symptoms is significantly poorer. This can be attributed to the fact that positive symptoms tend to be more disruptive, acute, and require constant attention. They often manifest as intense, unpredictable, and occasionally frightening behaviors. One study found a negative correlation between the severity of psychotic symptoms and the quality of life (QOL) of the caregivers. [22]

CONCLUSION

This study revealed that caregivers of individuals with schizophrenia tend to experience higher levels of depression and stress, alongside a diminished quality of life, compared to those caring for patients with obsessive-compulsive disorder (OCD), who more frequently report anxiety. Among caregivers of OCD patients, there is a notable association between the severity of the illness and increased levels of depression, anxiety, and stress, as well as a decrease in quality of life, particularly in terms of satisfaction regarding physical health and living conditions. For caregivers tending to individuals exhibiting positive symptoms of schizophrenia, the emotional toll is even greater, with reports of heightened depression, anxiety, and stress levels when compared to caregivers of those with negative symptoms. The quality of life for caregivers in the former group is significantly compromised.

The study emphasizes the critical role of social support and psychoeducational programs for caregivers, equipping them with the necessary tools to cope with the challenges of supporting loved ones with mental health issues. Mental health professionals need to evaluate the specific needs of these caregivers and facilitate connections to relevant services that can improve their overall quality of life.

Limitations:

A few limitations should be acknowledged in this study. First, the sample size was relatively small, and the cross-sectional design meant that no follow-up data were collected. Furthermore, important psychosocial factors, such as social support and the coping skills of caregivers, were not addressed. Given the cross-sectional nature of the research, it is crucial to conduct follow-up studies to delve deeper into these findings. Additionally, examining the psychological effects on caregivers in relation to the severity of obsessive-compulsive disorder (OCD) and the positive and negative symptoms of schizophrenia would provide valuable insights.

REFERENCES

1. Pandey A, Pandey AK, Singh A, Sureka P. A comparative study of caregivers burden in relatives of persons with schizophrenia and obsessive compulsive disorder. Int J Health Sci Res. 2020;10(7):306-10.
2. Saunders JC. Families living with severe mental illness: A literature review. Issues in mental health nursing. 2003 Jan 1;24(2):175-98.
3. El-Tantawy AM, Raya YM, Zaki AM. Depressive disorders among caregivers of schizophrenic patients in relation to burden of care and perceived stigma. Curr Psychiatr 2010;17(3):15-25
4. Vadher S, Desai R, Panchal B, Vala A, Ratnani IJ, Rupani MP, Vasava K. Burden of care in caregivers of patients with alcohol use disorder and schizophrenia and its association with anxiety, depression and

quality of life. General psychiatry. 2020 Jun 24;33(4):e100215.

5. Steketee G. Disability and family burden in obsessive compulsive disorder. Can J Psychiatry 1997;42(9):919-928
6. Ramos-Cerqueira AT, Torres AR, Torresan RC, Negreiros AP, Vitorino CN. Emotional burden in caregivers of patients with obsessive-compulsive disorder. Depression and anxiety. 2008 Dec;25(12):1020-7.
7. Oldridge ML, Hughes IC. Psychological well-being in families with a member suffering from schizophrenia: An investigation into long-standing problems. The British journal of psychiatry. 1992 Aug;161(2):249-51.
8. Ranjan LK, Kiran M. Stress, anxiety and depression among caregivers of individual with psychiatric disorders. Stress. 2016 Feb;2(2).
9. Sücüllüoğlu Dikici D, Eser E, Çökmüş FP, Demet MM. Quality of life and associated risk factors in caregivers of patients with obsessive compulsive disorder. Psychiatry and Clinical Psychopharmacology. 2019 Oct 2;29(4):579-86.
10. Caqueo-Urízar A, Gutiérrez-Maldonado J, Miranda-Castillo C. Quality of life in caregivers of patients with schizophrenia: a literature review. Health and quality of life outcomes. 2009 Dec;7:1-5.
11. Kaushal A, Sinha P, Garg A, Kumar R. Caregiver burden and its effect on quality of life in caregivers of OCD: A clinic based case-control study from northern India. Delhi Psychiatry J. 2016;19:53-64.
12. Smith PG, Day NE. The design of case-control studies: the influence of confounding and interaction effects. International journal of epidemiology. 1984 Sep 1;13(3):356-65.
13. Osman A, Wong JL, Bagge CL, Freedenthal S, Gutierrez PM, Lozano G. The depression anxiety stress Scales—21 (DASS-21): further examination of dimensions, scale reliability, and correlates. J Clin Psychol 2012;68(12):1322-1338.
14. Moritz S, Meier B, Kloss M, Jacobsen D, Wein C, Fricke S et al. Dimensional structure of the Yale–Brown obsessive-compulsive scale (Y-BOCS). Psychiatry Research. 2002;109(2):193-9
15. Kay SR, Fiszbein A, Opler LA. The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophrenia Bulletin. 1987;13(2):261-76.
16. Whoqol Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychological Medicine. 1998;28(3):551-8.
17. Oza H, Parikh MN, Vankar GK. Comparison of caregiver burden in schizophrenia and obsessive–compulsive disorder. Archives of Psychiatry and Psychotherapy. 2017;19(2):32-41.
18. Swain SP, Behura SS. A comparative study of quality of life and disability among schizophrenia and obsessive-compulsive disorder patients in remission. Industrial psychiatry journal. 2016 Jul;25(2):210.
19. Chabungbam G, Avasthi A, Sharan P. Sociodemographic and clinical factors associated with relapse in schizophrenia. Psychiatry and clinical neurosciences. 2007 Dec;61(6):587-93.
20. Shamsaei F, Cheraghi F, Bashirian S. Burden on family caregivers caring for patients with schizophrenia. Iranian journal of psychiatry. 2015 Sep;10(4):239.
21. Grover S, Dutt A. Perceived burden and quality of life of caregivers in obsessive–compulsive disorder. Psychiatry and clinical neurosciences. 2011 Aug;65(5):416-22.
22. Caqueo-Urízar A, Alessandrini M, Urzúa A, Zendjidjian X, Boyer L, Williams DR. Caregiver's quality of life and its positive impact on symptomatology and quality of life of patients with schizophrenia. Health and quality of life outcomes. 2017 Jan;15(1):1-9.