

# Family burden, quality of life and disability in obsessive compulsive disorder: An Indian perspective

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## ABSTRACT

**Background:** Obsessive compulsive disorder (OCD) is a psychiatric disorder that often tends to run a chronic course. The lifetime prevalence of OCD is around 1-3%, which is twice as prevalent as schizophrenia and bipolar disorder. **Aim:** To assess the family burden, quality of life (QoL) and disability in patients suffering from at least moderately ill OCD and then to compare them with schizophrenia patients of comparable severity. **Settings and Design:** We recruited 70 consecutive subjects (OCD = 35, schizophrenia = 35) who met study criteria between March 2005 and March 2006 from the psychiatric services of the National Institute of Mental Health and Neuro Sciences, Bangalore, India. **Materials and Methods:** The severity of illness was rated using the Clinical Global Impression-Severity (CGI-S). Instruments used in the current study were the Family Burden Schedule, the World Health Organization (WHO) QoL (Bref) and the WHO - Disability Assessment Schedule (DAS). **Statistical Analysis:** The Fisher's exact test/chi-square test was used to compare categorical variables and the independent sample t test was used to analyze continuous variables. Analysis of covariance (ANCOVA) was used to compare the groups after controlling for potential confounding variables. Pearson's correlation was used for correlation analysis. **Results:** Overall family burden, financial burden and disruption of family routines were significantly higher in schizophrenia patients compared to OCD although the groups did not differ with respect to other domains of family burden. On the WHO QoL, OCD patients were comparable to schizophrenia patients with respect to the psychological and social domains. On the WHO - DAS, both the groups were similar in all the domains except getting around. **Conclusion:** Severe OCD is associated with significant disability, poor QoL and high family burden, often comparable to schizophrenia. Therefore, there is an urgent need to increase the sensitivity among healthcare professionals to recognize and treat OCD.

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Obsessive compulsive disorder (OCD) is a chronic psychiatric disorder and it is one of the 10 most disabling medical conditions worldwide.<sup>[1]</sup> The lifetime prevalence of OCD is estimated to be around 2.5% to 3.29%.<sup>[2-5]</sup> The findings of such high rates of OCD in epidemiological studies resulted in OCD being labeled as a "hidden epidemic".<sup>[6]</sup> It is twice as prevalent as schizophrenia and bipolar disorder and the fourth most common psychiatric disorder.<sup>[3]</sup> Above all, 50-60% of the OCD patients also experience two or more comorbid psychiatric conditions during their lifetime.<sup>[7]</sup> However, OCD has not received due attention of the clinicians, researchers and policymakers because it is a non-psychotic illness.

Available evidence indicates that OCD patients report general impairment in their functioning and report poor quality of life (QoL).<sup>[8-12]</sup> They also suffer from disability in several areas, particularly in marital, occupational, emotional and social functioning.<sup>[13-16]</sup> More severe OCD symptoms were associated with general impairment in functioning.<sup>[17]</sup> There is evidence that even the treatment responders continue to experience

poor QoL.<sup>[10,18]</sup> There are studies comparing the QoL of OCD patients with various control groups like diabetes, depression, anxiety disorders and schizophrenia, which depicted that OCD patients were either similar or had substantial impairment in QoL compared to the control groups.<sup>[10,19-22]</sup> In a few studies, impairment in social and family relationships and occupational functioning in OCD patients was comparable to those with schizophrenic illness.<sup>[15,22]</sup> Unfortunately, these studies did not match the comparative group for severity of the illness.

The families of OCD patients report considerable burden due to illness and reduce their social activities, leading to an increase in their feeling of isolation and distress.<sup>[14,23-26]</sup> They also report poor QoL in the domains of physical wellbeing, psychological wellbeing and social relationships.<sup>[27]</sup> A study done in India comparing the family burden across various anxiety disorders reported that the degree of burden was essentially comparable across all the groups.<sup>[28]</sup> We hypothesized that patients suffering from severe OCD may have comparable level of global functioning, family burden, QoL and disability with patients suffering from schizophrenia.

## Materials and Methods

**Participants:** We recruited 70 consecutive subjects (OCD = 35, schizophrenia = 35) who met study criteria between March 2005 and March 2006 from the psychiatric services of the National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India. The participants gave informed consent and the study was carried out according to the ethical guidelines of the NIMHANS Ethics Committee. The study criteria included a) A primary diagnosis of DSM-IV OCD/schizophrenia,<sup>[29]</sup> b) continuous illness for the previous two years, c) Clinical Global Impression-Severity (CGI-S) score of  $\geq 4$ ,<sup>[30]</sup> and d) availability of a primary care giver involved in the care of the patient for the past two years. We attempted to control for severity of the illness in both the groups by recruiting at least 'moderately ill' subjects, so that both the groups were similar with respect to severity, which may otherwise act as a confounding factor. The CGI severity scale requires the clinician to rate the severity of the patient's illness on a seven-point scale in which, 1 is normal (not at all ill); 2 is borderline mentally ill; 3 is mildly ill; 4 is moderately ill; 5 is markedly ill; 6 is severely ill; and 7 is among the most extremely ill.

We did not include mildly ill OCD patients since they may not have significant impairment in functioning, QoL and disability. They are also possibly not a significant burden on the healthcare system. Hence, to include homogenous comparable OCD and schizophrenia patients in terms of severity of the illness, we attempted to control the severity of the illness using CGI-S.<sup>[30]</sup>

**Procedure:** A majority of the participants were already availing the clinical services provided at the NIMHANS hospital. At least one senior psychiatrist (teaching faculty at the institute) had already diagnosed them through unstructured clinical interview during their earlier visits. We had access to the clinical records of all the participants. The principal author administered the Mini-International Neuropsychiatry Interview (MINI)<sup>[31]</sup> for reconfirming the diagnosis and evaluating comorbidity and the CGI-S<sup>[30]</sup> to determine severity.

All the data were collected by personal direct interviews of the participants and their immediate family members (i.e. the primary care giver). The medical records were also used to collate information. The principal author trained in using the instruments performed all the evaluations. The family assessment schedule and family burden was administered to primary care givers. A senior consultant (SBM) reviewed the data obtained from all the sources.

**Assessments:** We used the *Global Assessment of Functioning (GAF)*,<sup>[29]</sup> the *World Health Organization (WHO) - Quality of Life (QoL) (BREF version)*,<sup>[32]</sup> the *WHO- Disability Assessment Schedule-II (WHO-DAS-II)*<sup>[33]</sup> and the *Family Burden Schedule (FBS)*<sup>[34]</sup> to assess global functioning, quality of life and disability. The *WHO - QoL (BREF version)*<sup>[32]</sup> is a 26-item self-administered questionnaire, which emphasizes the subjective responses of patients rather than their objective life conditions. The psychometric property is comparable to that of the full version of *WHO-QoL*.<sup>[32,35]</sup>

The *WHO-DAS-II*<sup>[33]</sup> was used to assess the activity limitations and participation restriction, actually experienced by an individual can we provide some details? The *FBS*<sup>[34]</sup> is a semi-structured interview schedule comprising 24 items grouped under six areas: financial burden, disruption of family routine activities, disruption of family leisure, disruption of family interaction, effect on the physical health and effect on the mental health of others. Each item is rated on a three-point scale; '0' representing no burden, '1' representing moderate burden and '2' representing severe burden.

In OCD subjects, the *Yale-Brown Obsessive Compulsive Scale (YBOCS)* symptom checklist and severity rating scale<sup>[36,37]</sup> and the *tic disorder section* of the *Schedule for Tourette and Behavioral Syndromes*<sup>[38]</sup> were employed to assess obsessive-compulsive symptoms and tics respectively. To assess the family's accommodations to the obsessive-compulsive symptoms of the patient, the *Family Accommodation Scale (FAS)*<sup>[39]</sup> was used. We used the *Positive and Negative Symptom Scale (PANSS)*<sup>[40]</sup> to assess the severity of schizophrenia symptoms.

**Statistical analysis:** Statistical analysis was performed using the Statistical Package for Social Sciences (SPSS) version 13.0. The SPSS syntax editor was used to recode and compute the raw scores of WHO-QoL and WHO-DAS as per the formula provided by the respective scales for final analysis. We compared categorical variables using the Fisher's exact/chi-square tests and continuous variables using the independent sample t test. For comparison of family burden, quality of life and disability between the groups, we employed Analysis of Covariance (ANCOVA) with age of onset and duration of illness as covariates. Correlation between socio-demographic/clinical variables, family accommodation and functioning with family burden, quality of life and disability was performed using the Pearson's correlation. All *P* values were two-tailed and statistical significance was set at  $P < 0.05$ .

## Results

**Socio-demographic and clinical variables:** The socio-demographic profile of the sample is given in Table 1. The two groups did not differ with regards to age, gender, marital status, domicile, family income, number of years of education and family history of psychiatric illness in the first degree relatives. The OCD subjects had significantly earlier age of onset ( $18.36 \pm 7.8$  vs.  $22.23 \pm 6.7$  years,  $t = -2.220$ ,  $P = 0.030$ ), longer duration of illness ( $118.80 \pm 61.6$  vs.  $85.14 \pm 58.2$  months,  $t = 2.350$ ,  $P = 0.022$ ), longer duration of untreated illness ( $43.09 \pm 50.8$  vs.  $17.91 \pm 25.6$  months,  $t = 2.615$ ,  $P = 0.012$ ) and better global functioning ( $34.92 \pm 8.8$  vs.  $27.12 \pm 5.7$ ,  $t = 4.367$ ,  $P = < 0.001$ ) when compared to subjects with schizophrenia. Those with schizophrenia were more likely to be unemployed than those with OCD.

Symptom profile of OCD and schizophrenia subjects is shown in Table 2. On the YBOCS severity rating scale, OCD subjects had a total score of 31.54 (SD, 3.58), which depicts that they were severely ill. On the FAS, relatives of OCD patients had a mean score of 29.72 (SD, 9.01), indicating extreme degree of modification by family members. On the PANSS scale,

Table 1: Demographic and illness characteristics

Variable	OCD n (%) / Mean (SD)	Schizophrenia n (%) / Mean (SD)	X 2/t	P 95% CI of the difference (df)
Gender				
Male	17 (48.6)	17 (48.6)	0.000	1.00
Female	18 (51.4)	18 (51.4)		
Marital status				
Single	23 (65.7)	23 (65.7)	3.56	0.169
Married	11 (31.4)	7 (20)		0.179, 0.199
Divorced/separated	1 (2.9)	5 (14.3)		(2)
Domicile				
Urban	27 (77.1)	19 (54.3)	4.06	0.131
Rural	3 (8.6)	6 (17.1)		0.150, 0.169
Semi-urban	5 (14.3)	10 (28.6)		(2)
Occupation				
Student	8 (22.9)	8 (22.9)	15.70	0.008
Housewife	8 (22.9)	6 (17.0)		
Govt/private servant	9 (25.7)	1 (2.9)		
Self-employed	4 (11.4)	2 (5.8)		
Agriculture	1 (2.9)	0		
Unemployed	5 (14)	18 (51)		
Family history of Psychiatric illness in the first-degree relative	14 (40)	10 (28.6)	1.014	0.314
Total family income in rupees	3786 (1852)	3472 (1662)	0.747	0.458
				-525.2, 1153.8 (68)
Number of years of education	12 (3.3)	10 (3.2)	1.573	0.120
				-0.118, 0.918 (68)
Age at assessment	27.29 (8.4)	27.66 (6.7)	-0.205	0.838
				-3.989, 3.246 (68)
Age of onset of illness	18.36 (7.8)	22.23 (6.7)	-2.220	0.030
				-7.351, -0.392 (68)
Duration of illness in months	118.80 (61.6)	85.14 (58.2)	2.350	0.022
				5.079, 62.24 (68)
Duration of untreated illness in months	43.09 (50.8)	17.91 (25.6)	2.615	0.012
				5.9, 44.4 (68)
CGI-severity baseline	5.49 (.5071)	5.43 (.5576)	0.449	0.655
				-0.202, 0.374 (68)
Suicidal ideas/attempts score on MINI	5.28 (6.2)	2.88 (5.6)	1.7	0.094
				-0.416, 5.216 (68)

schizophrenia participants had a mean total score of positive symptoms of 28.52 (SD, 5.26), negative symptoms of 23.66 (SD, 8.10), general psychopathology of 50.98 (SD, 8.46) and total PANSS score of 103.15 (SD, 15.75).

Regarding comorbidity, the OCD group had 26 (74%) participants with at least one (current) comorbid psychiatric diagnosis. Comorbid diagnoses were, major depressive episode ( $n = 18, 51\%$ ), dysthymia ( $n = 6, 17\%$ ), social phobia ( $n = 4, 11\%$ ) and bipolar affective disorder ( $n = 2, 6\%$ ). Surprisingly, the schizophrenia patients did not have any comorbid psychiatric diagnoses. The OCD patients scored higher on suicidal thoughts on the MINI suicidality section than schizophrenia patients ( $5.28 \pm 6.2$  vs.  $2.88 \pm 5.6$ ,  $t = 1.7$ ,  $P = 0.094$ ), although the difference was not statistically significant.

**Family burden:** Among the six dimensions of the family burden schedule [Table 3], schizophrenia patients had significantly higher score on financial burden ( $5.55 \pm 3.7$  vs.  $8.61 \pm 4.9$ ,  $F = 8.151$ ,  $P = 0.006$ ) and disruption of routine family activities ( $6.83 \pm 2.7$  vs.  $8.69 \pm 2.4$ ,  $F = 6.729$ ,  $P = 0.012$ ). However, the two groups were similar on the other four dimensions i.e. family leisure and effect on physical and mental health of others and disruption of family interaction. Overall,

family burden was significantly higher in schizophrenia patients compared to those with OCD ( $28.63 \pm 10.4$  vs.  $37.75 \pm 11.2$ ,  $F = 9.029$ ,  $P = 0.004$ ).

**Quality of life:** On the WHO QoL (BREF) scale, patients with OCD had better QOL in the physical ( $51.84 \pm 19.9$  vs.  $42.76 \pm 10.1$ ,  $F = 5.087$ ,  $P = 0.027$ ) and environmental domains ( $59.74 \pm 12.2$  vs.  $51.88 \pm 11.9$ ,  $F = 9.919$ ,  $P = 0.002$ ), but they were comparable to schizophrenia patients with respect to the psychological and social domains [Table 3].

**Disability:** On the WHO-DAS II, patients with OCD and schizophrenia had comparable disability in all domains except in "getting along with people" ( $47.86 \pm 27.6$  vs.  $65.95 \pm 29.8$ ,  $F = 5.757$ ,  $P = 0.019$ ). However, the total disability score was not significantly different between both the groups ( $46.43 \pm 13.7$  vs.  $51.81 \pm 17.9$ ,  $F = 1.544$ ,  $P = 0.218$ ).

**Correlation of variables in OCD patients:** Pearson's correlation of various socio-demographic and clinical variables (age of onset, duration of illness, duration of untreated illness, YBOCS severity score, CGI severity, global functioning and family accommodation) with total DAS, four domains of QOL and overall family burden score in OCD patients was

**Table 2: Symptom profile in obsessive compulsive disorder participants on Yale-Brown obsessive compulsive scale and family accommodation**

Obsessions	Current <i>n</i> (%)	Past <i>n</i> (%)
Contamination	26 (74.3)	22 (62.9)
Sexual obsession	15 (42.9)	7 (20)
Hoarding	8 (22.9)	8 (22.9)
Need for symmetry	20 (57.1)	13 (37.1)
Aggressive	15 (42.9)	14 (40)
Religious or/blasphemous	13 (37.1)	10 (28.6)
Pathological doubts	20 (57.1)	17 (48.6)
Superstitious	13 (37.1)	-
Miscellaneous	5 (14.3)	-
Compulsions		
Cleaning	26 (74.3)	21 (60.0)
Repeating	22 (62.9)	22 (62.9)
Ordering	21 (60.0)	13 (60.0)
Mental rituals	14 (40)	10 (28.6)
Counting	4 (11.4)	3 (8.6)
Excess list making	1 (2.9)	1 (2.9)
Slowness	22 (62.9)	13 (37.1)
Need to tell	13 (37.1)	10 (28.6)
Need to touch	6 (17.1)	5 (14.3)
Checking	24 (68.6)	19 (54.3)
Collecting	5 (14.3)	5 (14.3)
Superstitious	5 (14.3)	5 (14.3)
Reassurance seeking	15 (42.9)	11 (31.4)
Self damaging	3 (8.6)	2 (5.7)
Other rituals	2 (5.7)	3 (8.6)
Severity Of OCD	Mean	SD
(YBOCS) <i>n</i> = 35		
YBOCS Obsessions Sub-scores	15.97	1.84
YBOCS Compulsions Sub-scores	15.63	2.20
Total YBOCS Score	31.54	3.58
Total family accommodation	29.72	9.06
Symptom dimension of Schizophrenia (PANSS) <i>n</i> = 35		
Total positive score	28.52	5.26
Total negative score	23.66	8.10
Total general psychopathology score	50.98	8.46
Total PANSS score	103.15	15.75

carried out. Only significant findings are shown in Table 4. Total YBOCS scores ( $r = 0.441, P = 0.008$ ) and CGI-S scores ( $r = 0.359, P = 0.034$ ) had significant positive correlation with total disability scores. However, psychological quality of life had significant negative correlation with total YBOCS scores ( $r = -0.363, P = 0.032$ ) and CGI-S scores ( $r = -0.459, P = 0.006$ ). Total family accommodation scores had significant positive correlation with total family burden ( $r = 0.479, P = 0.004$ ) but negative correlation with global assessment of functioning ( $r = -0.463, P = 0.005$ ). Global assessment of functioning had significant positive correlation with social quality of life ( $r = 0.405, P = 0.016$ ).

We assessed the impact of comorbidity on family burden, QoL and disability in OCD. The OCD subjects without any comorbidity had significantly higher psychological quality of life compared to those with any comorbidity ( $44.9 \pm 11.4$  vs.  $32.4 \pm 14.7, t = 2.317, P = .027$ ). Similarly, those without comorbid depression had significantly higher psychological quality of life than those without depression ( $43.6 \pm 14.1$  vs.  $28.0 \pm 11.3, t = 3.617, P = 0.001$ ). Presence of any comorbid

condition and depression had no impact on family burden, disability and other domains of QoL.

## Discussion

To the best of our knowledge, this is the first systematic study from India to analyze and compare the family burden, quality of life and disability between patients suffering from OCD and schizophrenia after controlling for severity of the illness. The main strengths of our study include systematic and elaborate assessment of clinical profile using valid instruments.

**Global functioning:** The OCD subjects had major impairment in several areas of functioning such as work, social and family relationships (GAF mean score 34.92) although schizophrenia subjects were much worse (mean score 27.12) [Table 3]. Our finding is similar to the poor global functioning reported in a recent study of severely ill OCD patients admitted for intensive residential treatment.<sup>[41]</sup> However, other studies also report impairment in the marital and employment status of OCD-affected individuals.<sup>[19,41,42]</sup>

**Family burden:** In the present study, primary care givers of OCD patients reported similar family burden as primary care givers of schizophrenia with regard to disruption of family leisure, family interaction and effect on physical and mental health of others [Table 3].<sup>[26]</sup> However, the financial burden, disruption of family routines and overall family burden was significantly lesser in primary care givers of OCD patients than in those of schizophrenia patients. A study from India reported that the greatest burden was felt for disruption in family routine and leisure activities, with lesser burden also being felt on family interaction and financial matters.<sup>[28]</sup> In the study by Magliano *et al.* the degree of family burden correlated with the level of patients' disability and severity of patients' obsessive-compulsive symptomatology.<sup>[43]</sup> In contrast, our study did not show any correlation between family burden and severity of OCD and patients' disability. This is possibly because our sample constituted mainly severely ill OCD subjects as reflected in the YBOCS score (Table 2). In a study involving narrative interviews of relatives of OCD patients, relatives described different family burdens and different coping strategies.<sup>[44]</sup> A recent study also reported poor health-related QoL in first-degree relatives of OCD patients.<sup>[45]</sup>

**Family accommodation:** Family accommodation of patients with OCD by participating in symptoms (proxy compulsions, compulsive reassurance, assisting in rituals and compulsions) and by modification of personal and family routines is intended to reduce the patient's anxiety or anger directed at family members.<sup>[15]</sup> Our study had a mean total score of 29.72 on FAS, which is an extreme family accommodation. The FAS score correlated positively with family burden, a finding similar to that of Calvocoressi *et al.*,<sup>[15]</sup> but negatively with GAF score, which confirms the finding of a previous study<sup>[39]</sup> that higher accommodation is associated with lower functioning in OCD patients.

**Quality of life:** The OCD patients in this study reported similar

**Table 3: Comparison of family burden, quality of life and disability in obsessive compulsive disorder and schizophrenia patients\***

Variable	OCD Mean (SD)	Schizophrenia mean (SD)	F	P	95% CI of the difference
<b>Family burden</b>					
Financial burden	5.55 (3.7)	8.61 (4.9)	8.151	0.006	-5.395, -0.955
Disruption of routine family activities	6.83 (2.7)	8.69 (2.4)	6.729	0.012	-2.963, -0.386
Disruption of family leisure	5.75 (2.9)	6.83 (1.9)	1.651	0.203	-2.041, 0.443
Disruption of family interaction	5.40 (2.1)	6.60 (2.5)	2.510	0.118	-2.061, 0.237
Effect on physical health of others	1.23 (1.4)	1.86 (1.5)	3.704	0.059	-1.444, 0.026
Effect on mental health of others	1.58 (1.4)	2.12 (1.5)	1.928	0.170	-1.260, 0.226
Overall family burden	28.63 (10.4)	37.75 (11.2)	9.029	0.004	-13.8, -2.782
<b>Quality of life</b>					
Physical QOL on 0-100 scale	51.84 (19.9)	42.76 (10.1)	5.087	0.027	1.037, 17.028
Psychological QOL on 0-100 scale	35.60 (14.9)	35.24 (10.9)	0.033	0.856	-7.118, 5.926
Social QOL on 0-100 scale	39.53 (16.3)	31.43 (17.9)	2.079	0.154	-2.353, 14.579
Environmental QOL on 0-100 scale	59.74 (12.2)	51.88 (11.9)	9.919	0.002	3.447, 15.386
<b>Disability assessment scale</b>					
Understanding and communication score	41.58 (22.2)	54.43 (26.6)	3.706	0.059	-24.214, 0.441
Getting around	18.22 (15.2)	15.00 (22.2)	0.455	0.502	-6.397, 12.922
Self care	38.29 (24.8)	41.15 (34.2)	0.061	0.806	-16.751, 13.061
Getting along with people	47.86 (27.6)	65.95 (29.8)	5.757	0.019	-32.207, -2.951
Life activities	73.15 (23.1)	84.00 (55.4)	0.077	0.783	-23.225, 17.571
Participation in society	68.10 (31.5)	68.70 (17.1)	0.040	0.842	-14.133, 11.559
Total DAS Score	46.43 (13.7)	51.81 (17.9)	1.544	0.218	-12.783, 2.976
Global assessment of functioning	34.92 (8.8)	27.12 (5.7)	15.943	<0.001	3.802, 11.408

Statistical significant at the 0.05 level,  $df = 1$ , error = 66; \*Analysis of Covariance (ANCOVA) was used with age of onset and duration of illness as covariates

**Table 4: Correlates of clinical variables with WHO-DAS, WHO-QOL and family burden schedule domains in obsessive compulsive disorder patients**

Variable	Total DAS Pearson's $r(P)$	Physical QOL Pearson's $r(P)$	Psychological QOL Pearson's $r(P)$	Social QOL Pearson's $r(P)$	Environ QOL Pearson's $r(P)$	Over all family bur Pearson's $r(P)$
Duration of illness	0.102 (0.558)	-0.056 (0.751)	0.043 (0.806)	-0.197 (0.257)	-0.103 (0.557)	-0.182 (0.294)
Family income	-0.051 (0.769)	0.196 (0.260)	0.020 (0.907)	0.353* (0.038)	0.001 (0.993)	-0.265 (0.124)
YBOCS obsessions score	0.416* (0.013)	-0.239 (0.167)	-0.401* (0.017)	-0.198 (0.254)	-0.218(0.209)	0.267 (0.121)
YBOCS compulsions score	0.375* (0.026)	-0.185 (0.287)	-0.236 (0.172)	-0.248 (0.151)	-0.157 (0.369)	0.076 (0.664)
YBOCS total score	0.441** (0.008)	-0.241 (0.162)	-0.363* (0.032)	-0.267 (0.119)	-0.232 (0.180)	0.210 (0.226)
CGI severity	0.359* (0.034)	-0.091 (0.604)	-0.459** (0.006)	-0.285 (0.097)	-0.238 (0.169)	0.330 (0.052)
Family accommodation	0.198 (0.255)	-0.081 (0.642)	-0.153 (0.380)	-0.331 (0.052)	0.097 (0.578)	0.479** (0.004)
Global functioning	-0.295 (0.085)	-0.010 (0.955)	0.208 (0.231)	0.405* (0.016)	0.275 (0.110)	-0.312 (0.068)

\*Correlation is significant at the 0.05 level (2-tailed); \*\*Correlation is significant at the 0.01 level (2-tailed)

QoL as schizophrenia patients in the areas of psychological and social domains. A study by Bystritsky *et al.*, has reported similar finding with regard to social impairment being similar in OCD and schizophrenia patients.<sup>[221]</sup> In the present study, patients with OCD had better physical and environmental quality of life than those with schizophrenia. Similar results have been documented in an another study, in which OCD patients reported the same QoL as schizophrenia patients in the area of mental health, but better quality of life in the areas of physical health.<sup>[21]</sup> Psychological QoL in OCD patients negatively correlated with severity of obsessions, total score of the YBOCS and global severity of the illness [Table 4]. In addition, those without depression had better psychological QoL. Results from the present study support those from prior investigations on quality of life in OCD.<sup>[8,10,21,22]</sup> Poor psychological and social QoL in OCD could be due to the associated anxiety/distress; interference in functioning, time spent on symptoms and preserved insight into their illness.

**Disability:** The OCD patients and schizophrenic patients did

not differ much with respect to disability on DAS except in the domain of getting around with people [Table 3]. This indicates that severe OCD produces disability often comparable to that in schizophrenia, a finding similar to those reported in two previous studies.<sup>[21,22]</sup>

The present study has demonstrated that severe OCD is associated with significant impairment in functioning and severe family burden and disability. In addition, the QoL is poor. Families of severe OCD patients often cope with illness with high accommodation that has not been associated with good outcome. What is more alarming is that severe OCD and schizophrenia are often associated with comparable disability, family burden and poor QoL.

Our study has certain limitations that need to be kept in mind while interpreting the findings. They are: small sample size; cross-sectional evaluation; and unblinded status of the rater to the diagnosis. Our inclusion criterion was recruitment of patients who were at least moderately ill on CGI-S. Therefore,

the findings may not be generalizable to a larger population of mildly ill OCD patients.

Although OCD is more prevalent than schizophrenia and the fourth most common mental disorder<sup>[1]</sup> with a prevalence rate of 1-3%,<sup>[2-5]</sup> it has received only modest attention. Patients suffering from OCD are often undiagnosed and untreated for several years. In view of the disability, family burden and poor QoL, there is an urgent need to sensitize the healthcare professionals in recognizing and treating OCD effectively. In addition, there is a need to hasten the process of understanding the biology and treatment of OCD in view of the fact that existing treatment options are often unsatisfactory with a response rate of only 40-60%.<sup>[46]</sup> Lastly, efforts need to be made in the direction of educating the public about the highly prevalent nature of this illness, its common clinical manifestations and treatment options.

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