ORIGINAL ARTICLE

Impact of Obsessions And Compulsions on the Quality of Life in Obsessive Compulsive Disorder

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Abstract : *The distress of the patients of Obsessive–compulsive disorder (OCD) due to the senselessness and intrusiveness of their obsessions and the time spent in compulsions are acknowledged by the diagnostic criterion. OCD impacts everyday life in academic, occupational, social and family functioning. There is large variability in the results of the studies studying the differential impact of obsessions & compulsions on the Quality of Life (QoL) of patients and their validity has been found to be unsatisfactory. The aim of our study was to study which domains of QoL were particularly affected by obsessions and compulsions in OCD patients using an instrument like WHOQOL-BREF which study QoL as a generic, multidimensional construct. Forty patients (22 females, 18 males) between 18 and 65 years old with OCD were recruited from the OPD. The severity of OCD symptoms was assessed by the Yale Brown Obsessive-Compulsive Scale (Y-BOCS) and depressive symptoms by the Beck Depression Inventory. QoL was assessed by means of the WHOQOL-BREF, a self-administered questionnaire developed by WHO. Data was assessed using descriptive and inferential statistics. Results revealed that compulsions and depressive symptoms reduced patients' QoL in the WHOQOL-BREF domains of 'physical well-being', 'psychological well-being' and 'environment', whereas obsessions did not have any impact on QoL ratings. In conclusion, in order to judge the QoL of OCD patients, obsessions and compulsions have to be considered separately.*

INTRODUCTION

Obsessive–compulsive disorder (OCD) is a severe and debilitating anxiety disorder affecting 2.5% of the population, at some time in their lifetime. If untreated, the probability of symptom remission is extremely low. The chronic and severely disabling disorder ranks tenth in the World Bank's and WHO's leading causes of disability.[1] The senselessness and intrusiveness of the obsessions and the time spent in compulsions are the causes for patient's distress, also acknowledged by the diagnostic criterion.[2,3] OCD impacts everyday life in occupational, social and family functioning.[3]

WHO has defined Quality of life (QoL) as the condition of life resulting from the combination of the effect of complete range of the factors such as those determining health, happiness and a satisfying occupation, education, social and intellectual attainments, freedom of actions and freedom of expression. Especially in recent years this QoL concept has been increasingly accepted as an important outcome measure in patients with mental illnesses.[4]

QoL in OCD has been reported to be lower than in the general population.[5] There has been little

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examination of the extent to which the presence of persistent obsessions and compulsions impact on the QOL of persons with OCD. The studies conducted till date have reported inconsistent results.[4,6,7] For instance, Masellis et al.[7] from Canada using the Illness Intrusiveness Rating Scale showed that QoL, measured as illness intrusiveness, was especially affected by obsessions, but not by compulsions. These findings are supported by a study identifying the presence of obsessions of sexual/religious and aggressive content as a unique factor related to a poorer long-term clinical outcome in OCD.[7] These inconsistent results might come from differences among the study designs, including very different QoL instruments and the criteria of inclusion and exclusion of the samples.

The relatively older instruments for assessing QoL, like Quality of Life Checklist,[8] Lehman Quality of Life Interview,[9] Quality of Life Index for Mental Health,[10] etc. assess the impact of the severe and persistent mental illness, lay more emphasis on specific domains associated with the functional impairment and follow the general QoL framework. Other instruments that focus on specific disorders like Quality of Life Enjoyment and Satisfaction Questionnaire,[11] SmithKline Beecham Quality of Life Scale[12] and Quality of Life in Depression Scale[13] have been developed predominantly with data from outpatients of major depression and stress on the the less disabling nature of the disorder. The newer instruments like Quality of Life Questionnaire,[14] QoLGAP [15] and GRIDQoL[16] assess consumer's perspective, gap between ideal and actual self or give weights to different items based on little supporting evidence. Most of these instruments have not been translated and validated for our language and population. Most of the previously developed instruments measuring QoL deviate from each other sharply in the interpretation and weighing of single dimensions and this explains much of the inconsistencies seen in the studies.[17] Many of them concentrated on capturing functional impairment resulting from illness symptoms e.g. SF-36 (used by most studies) or the Illness Intrusiveness Rating Scale.[7] Because of the development of newer QoL instruments and the corresponding limitations of individual instruments, we used the WHOQOL-BREF an internationally recognized instrument for this study. A need for this study was felt to address the inconsistency in results of the previous studies and the lack of similar studies with OCD patients in India.

OBJECTIVES

To study which domains of QoL were particularly affected by obsessions and compulsions in OCD patients.

MATERIAL AND METHODS

Study sample: Forty patients of OCD diagnosed as per ICD-10 (F42.0-F42.2), treated as outpatients attending the OPD were consecutively recruited. Four patients refused to participate in the study. *Inclusion Criteria were* patients of either sex, age between 18 and 65 years., and patients fulfilling criteria for OCD as per ICD-10 (F42.0-F42.2).*Exclusion Criteria were* patients with any comorbid psychiatric disorders diagnosed according to ICD-10, and patients with any chronic physical illness, organic brain disorders or substance abuse.

Instruments:

a) **Sociodemographic Performa**: It consisted of a structured format to record certain variables regarding the patient such as age, sex, marital status, education, occupation and others.

b) **Yale Brown Obsessive-Compulsive Scale (Y-BOCS):** The Y-BOCS is a standardized, clinician-administered scale for assessing the severity of clinical obsessions and compulsions. It comprises 10 items pertaining to obsessions and compulsions,

rated on a 5-point Likert scale ranging from 0 (no symptoms) to 4 (severe symptoms); it has been shown to possess high internal consistency and validity.[18,19]

c) **WHO Quality of Life BREF (WHOQOL-BREF):** In order to assess QoL, we used the Hindi version of the WHOQOL-BREF.[20] The WHOQOL-BREF, an abbreviated version of the WHOQOL-100, is a self-administered questionnaire. It comprises of 24 items categorized into four broad domains: physical health, psychological well-being, social relationships and environment. The items are rated on a 5-point scale. [21]

d) **Beck Depression Inventory (BDI):** The BDI is a 21-item (four-point scale) self-report instrument designed to assess depressive symptoms severity and has been shown to be a reliable and well-validated measure of depressive symptomatology, Hindi version was used for the study.[22] The total score of the BDI can range from 0 to 63. Beck et al. suggested that a cutoff point of 12/13 could be suitable to detect depression among psychiatric patients. [23,24]

To estimate the effects of the two sub scores of the Y-BOCS, linear regression analysis was used treating the two sub scores as well as the four domain scores of the WHOQOL-BREF as continuous variables. Analyses were done by SPSS version 12.0.

RESULTS

Demographic and Clinical Characteristics

The mean age of OCD patients was 38.49 (SD 12.9) years (range 21-62) and 55% were females. Marital status was single (42.5%), married (47.5%), and separated, divorced or widowed (10%). 25% had primary education, 27.5% had completed senior secondary school,17.5% were graduates,10% had a postgraduate degree and 20% were illiterate. More than half of the patients (52.5%) were unemployed. The mean duration of illness was 17.88 (SD ± 12.53) years (range 1-42). Patients' mean total score on the Y-BOCS was 17.85 (SD ± 8.04), which is consistent with moderately severe symptoms.[7] Almost one third (28.2%) of the patients suffered from severe or extremely severe symptoms. The mean subtotal scores were 8.15 (SD ± 5.02) for obsessions and 9.69 (SD ± 5.09) for compulsions. All sociodemographic and clinical characteristics are summarized in Table 1.

QoL and Symptom Severity

Table 1
Sociodemographic and clinical characteristics of patients

	OCD (n=40)
Age,years(mean ± SD)	38.5(12.9)
Gender, %	
Female	55
Male	45
Marital status,%	
Single	42.5
Married	47.5
Seprated,divorced or widowed	10
Level of education completed,%	
Illiterate	20
Upto primary class	25
Upto Sr. Secondary class	27.5
Graduate	17.5
Postgraduate	10
Occupation status,%	
Employed	47.5
Unemployed(inclstudents, housewives,temporarily unemp.)	52.5
Duration of illness,years(mean ± SD)	17.88 (12.53)
Y-BOCS scores(Mean ± SD)	
Obsessions	8.15 (5.02)
Compulsions	9.69 (5.09)
Total	17.85
BDI, total score (mean ± SD)	9.075 (4.4)

After checking for sociodemographic and clinical characteristics (including depressive symptomatology), only compulsions measured by the Y-BOCS subscore 'compulsion' were negatively associated with QoL (table 2). This applies to all domains of QoL except for 'social relationship'. There were no statistically significant associations between obsessions and the four QoL domains. Explained variance was largest for 'psychological well-being' ($R^2 = 0.644$) and smallest for 'social relationship' ($R^2 = 0.012$). Depressive symptoms, measured by the BDI total score, had the strong negative effect on QoL, least effect was in environment domain (Table 2).

DISCUSSION

The results of our study are similar to recent studies conducted using WHOQOL instrument.[25] Compulsions and not obsessions were found to be negatively associated with QoL. This applied to the domains 'physical well-being', 'psychological well-being' and 'environment'. But some studies as Masellis et al.[7], have found that QoL is affected by obsessions but not by compulsions, our findings imply the exact opposite. This variability of results has been reported by many[5,6] and is accounted by the limitations of the instruments used by these studies to assess QoL.[17] The use of instruments like WHOQOL-BREF which study QoL as a generic, multidimensional construct is considered more valid and reliable[17,25] especially when making international and intercultural comparisons.

The domain 'physical well-being' contains questions about physical health, sleep, pain and coping with every-day life and compulsions in OCD are known to be time consuming and impair daily physical activities. Domain 'environment' includes questions about physical safety and security, home environment, health and social care and other questions about one's daily life. Because patients with compulsions such as contamination and cleaning often experience

Table 2
Predictors of QoL of patients with OCD

Predictor variables	Physical well-being			Psychological well-being			Social relationship			Environment		
	B	SE	p<	B	SE	p<	B	SE	P<	B	SE	p<
Gender (female)	2.90	3.23	0.374	2.46	3.26	0.455	5.52	6.39	0.392	5.81	3.31	0.086
Age	-0.31	0.17	0.071	0.11	0.17	0.506	0.58	0.33	0.088	-0.31	0.17	0.081
Education												
Illeterate	5.27	5.64	0.355	-5.12	5.71	0.373	9.05	11.17	0.422	-7.5	5.79	0.204
Upto Primary	1.57	6.48	0.809	-6.48	6.55	0.327	-13.04	12.82	0.314	-0.46	6.65	0.945
Upto Sr. Secondary	-2.14	5.82	0.714	8.38	5.89	0.161	-0.69	11.52	0.952	10.33	5.98	0.090
Graduate	0.63	5.01	0.900	-6.73	5.07	0.190	1.83	9.92	0.854	-1.85	5.14	0.720
Post Graduate	9.19	8.49	0.285	-5.77	8.59	0.505	-0.95	16.81	0.955	-5.64	8.72	0.520
Occupational Status (Employed)	-1.40	3.56	0.695	-4.53	3.60	0.214	-5.72	7.05	0.421	-5.69	3.66	0.126
Duration of Illness, Years	-0.03	0.18	.852	-0.09	0.18	0.624	-0.27	0.35	0.440	0.30	0.18	0.101
Y-BOCS subscores												
Obsession	-0.33	0.33	0.322	0.12	0.34	0.712	0.54	0.66	0.422	0.33	0.34	0.340
Compulsion	-1.37	0.36	0.000**	-0.98	0.37	0.010**	-0.49	0.72	0.501	-1.43	0.37	0.000**
BDI Total score	-0.96	0.16	0.000**	-1.53	0.17	0.000**	-0.68	0.33	0.044*	-0.37	0.17	0.035*
R^2	0.588	0.644	0.012	0.222								

B= Beta coefficient, SE= Standard error, p=p value, R2=Coefficient of determination, * p< .05 significant, ** p<.01 highly significant

feelings of anxiety, danger, and constant worry in their own environment, they wash or control constantly. Questions in the domain 'psychological well-being' are associated with negative feelings of mood, sadness, anxiety, and dissatisfaction with oneself. This may be reduced in OCD patients because compulsions are often senseless or bizarre, and are experienced agonizingly. The domain 'social relationship', which especially contains questions about satisfaction with personal relationships and with support by friends, was not affected by the compulsions. Relatives often become part of the rituals and, even in the patient's absence, take over behavioral rules determined by the compulsions. Having this in mind, patients may see their so-defined social relationships as being supportive, thereby assessing this domain of subjective QoL as not impaired. Depressive symptoms were negatively associated with QoL. Although cases of major depression diagnosed according to ICD 10 were excluded. Similar findings have been consistently reported by all studies.[5,6,25]

The small sample size and patients recruited from OPD are unlikely to be representative of OCD patients in community. Further studies using larger representative OCD patient samples from community must be conducted. Also the casual relationship between symptom functioning and QoL cannot be assessed due to the cross-sectional nature of the study design.

The present findings have practical implications. Given the importance of the different symptoms, clinician must assess compulsions more thoroughly to assess the impairment in patients QoL in domains of physical well-being, psychological well-being and environment. But the relatives need to be specifically interviewed regarding the impairments in social relationships as the study shows that patients may be liable to underreport the same. Also specific interventions for obsessions, compulsions and depressive symptoms are warranted to improve psychosocial functioning and QoL. The study also emphasizes that studies using instruments like WHOQOL-BREF which study QoL as a generic, multidimensional construct can be considered more valid and reliable than the previous studies which used instruments with limited construct validity, especially when making international and intercultural comparisons.[6,17,25,26]

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