# Severity and Dimensions of Obsessive-Compulsive Disorder and Family Accommodation: OCD severity and Family Accommodation

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### **ABSTRACT**

**Background and Objectives:** Family accommodation (FA) refers to ways in which family members assist the patient in the performance of rituals, compulsions, avoidance of anxiety provoking situations, or modification of daily routines to assist a relative with obsessive-compulsive disorder. The purpose of this study was to study the association between the family accommodation and dimensions of obsessive-compulsive disorder (OCD).

**Methods:** The study was included 45patients and their family members, Yale brown Obsessive-Compulsive scale (YBOCS) was used to assess the severity of OCD in patients and Dimensional Yale brown Obsessive-Compulsive scale (DYBOCS) was used to identify the severity of different dimensions in OCD patients family members were assessed on Family Accommodation Scale for Obsessive-Compulsive Disorder – Self Rated version (FAS-SR) for understanding accommodation level in family. A Pearson's correlation coefficient was used to evaluate the association between variables.

**Results:** FA was found to be highly present in the family of patients with OCD. On the DYBOCS we found the dimension of cleaning and washing were prevalent and highly correlated with FA.

**Conclusion:** The findings suggested that the family accommodation is very common in families of OCD patients and strongly associated with symptom severity of few specific dimensions.

**Keywords:** Family accommodation, obsessive–compulsive disorder, predictors, symptoms dimensions.

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# **INTRODUCTION**

Obsessive-Compulsive Disorder (OCD) is a heterogeneous disorder. According to the American Psychiatric Association, Obsessions present in the form of intrusive thoughts, images, or phrases that persistently enter into the individual's mind. Compulsions manifest by rituals or mental acts that need to be, repeatedly carried out, often in response to experiencing anxiety or distress due to an obsession. Affecting an estimated 1% of the adult population [1]. Individuals with OCD experience significant interference in various aspects of their lives including social, occupational, academic or family impairment [2]. Obsessive-compulsive disorder is an insidious condition that is capable of tricking and deceiving not only the sufferer, but his or her entire family as well.

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In the last few years family accommodation is a concept which has obtain specific interest in this area. Family accommodation can manifest in various forms including modifying family routines, engaging in the patient's compulsions, and facilitating avoidance of OCD triggers [3]. For instance, a parent or partner may engage in excessive hand washing rituals to assuage the patient's contamination fears, or excessively reassure the patient that the stove is turned off and the house will not burn down, Although family members often engage in these behaviours in hopes of attenuating OCD-related distress and mitigating the time occupied by symptoms [4]. OCD symptoms also allows the individual to avoid confronting his/her obsessional thoughts (through continued engagement in compulsions) and strengthens associations between these obsessions and anxiety. Thus, in the longer term, such family responses can also yield a negative impact, legitimizing patient's obsessional beliefs and creating an escalating cycle between family members' accommodating responses and OCD symptoms [5]. Approximately 75% of OCD relatives participated at least minimally in rituals or avoidance or modified their behaviour to accommodate patient's symptoms. Accommodation include providing reassurance (>30%), active participation in rituals and/or avoidance at patient's request (33-60%), taking over patient duties (>33%), and modifying family activities and routines (>35%) [4]. Higher levels of family accommodation are associated with increased OCD symptoms, increased functional impairment, and poorer therapeutic treatment outcome in both children and adults [4]. Symptom accommodation maintains the OCD symptomology by disallowing the individual with OCD to face their feared situations. The possible reason found by authors is that they suggest functional impairment in patients with OCD and long term adjustment with them OCD patient might influence the family function and family accommodation may be a work as a contributor in disturbed family functioning [3]. The aim of the study was to explore the severity of illness, dimensions of illness in OCD patients and level of family accommodation in patient's families and to determine possible associations between these variables.

### **METHODOLOGY**

Purposive sampling method was used for sample selection. The study sample was drawn from Dept. of Psychiatry, King Georg's Medical University. Ethical committee of KGMU has approved this study, it was a cross-sectional study of Obsessive Compulsive Disorder patients and their family members. Written informed consent was taken from all patients and their family members in the study It included both old and newly registered patients diagnosed with Obsessive Compulsive disorder (as per DSM IV -TR) and the family members fulfilling the selection criteria were recruited in the study.

Operational definition of family member for the purpose of the study is taken from a previous study [6].

# **Participants**

**OCD patients and family members:** We enrolled (N=45), patients Age between 18 to 60 years, Minimum education up to class Vth, Patients of OCD scored higher than 7 on YBOCS with and without comorbidity of Anxiety Disorders and Mood Disorder (Mild to moderate level of depression /anxiety), were not received any psychotherapeutic treatment (CBT and ERP) for OCD. Excludes patients with any other co-morbid psychiatric disorder, patients with a physical disability or condition requiring priority medical management and Use of substance except tobacco.

For each patient, we selected only one family members on the basis of the following criteria. Age between 18 to 60 years, living with the patient for at least 1 years, minimum education up to class V<sup>th</sup>, Not having received any psychotherapeutic treatment for distress related to their relationship with the OCD relative. We excluded the family members scored higher than 2 on GHQ-12 [7]. Presence of obsessive compulsive disorder in the family except patient. Family member with a physical disability or condition requiring priority medical management and use of other substance except tobacco.

The family members and patients were interviewed with the Structured Clinical Interview for DSM-IV TR Axis I Disorders, MINI [8] in order to exclude the presence of any current mental disorders.58 patients met criteria for one or more psychiatric disorders and therefore they were excluded from the study. 45 OCD patients with their healthy family members were finally included in the study.

## **Clinical Measures**

OCD patients and family members: A systematic face-to-face interview that consisted of structured and semi structured components was used to collect data from patients. All socio-demographic and illness characteristics were obtained through the administration of a semi structured interview covered with Socio-demographic data: age, sex, marital status and years of education. Mini International Neuropsychiatric Interview (M.I.N.I.) v.6.0.0 [8] was used to rule out comorbid psychiatric disorders in patients (except Anxiety and Depression). Obsessive—compulsive symptoms: OCD symptoms were measured with the YBOCS [9]; for assessing the overall severity and then applied DYBOCS [10] to assess the severity of multiple dimensions in the patients. Family accommodation was measured using the FAS-SR [11] a 19-item clinician-rated measure that assesses the degree to which family members of patients with OCD have accommodated patient rituals over the preceding month. In addition, the following rating scales were included in the assessment of OCD patients: Hamilton Rating Scale for Anxiety [12] and 17-item Hamilton Rating Scale for Depression [13].

### **RESULTS**

Table-1 Descriptive statistics of the clinical Characteristics of patients with obsessive compulsive disorders.

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Clinical variables	Percentage of Frequency		Mean		
Obsessions	100		13.42	4.09	
Compulsions	91.11		13.11	4.66	
YBOCS Total	YBOCS Total 100		25.86		
HAM- A	80.00		7.60	3.77	]
HAM-D	66.67		10.13	6.69	
DYBOCS		N=45 (%)	Mean		SD
Contamination	88.88	8.97		4.71	
Hoarding & Collecting		28.88	2.48		4.15
Symmetry, Ordering, Counting & Arranging		62.22	4.93		4.51
Aggressive obsessions & related compulsions		11.11	00.37		1.80
Sexual & Religious obsessions & compulsions		22.22	1.73		3.76
Miscellaneous		26.66	2.02		3.96
FAS-SR		N =45 (%)	Mean		SD
Family Accomm	91.12	33.57		12.49	

Mean score of Y-BOCS for obsession and compulsions were found 25.86 which indicates clinically significant severe level of OC symptoms. The mean scores (SD) on the FAS were 33.57± 12.49. Anxiety symptom was found present in around 80% patients and mean score of the HAM-A was 7.60. Symptoms of depression was presented in 66% patients mean score of HAM-D was found around 10.13. DYBOCS findings are suggestive that the indicative that around 89% patients were suffering with the dimension of cleaning and contamination and mean score of this dimension around 9. Second highly prevalent dimension in our sample was found Symmetry, Ordering, Counting & Arranging

To explore the pattern of demographic variables in presented samples we entered current age, marital status, gender, family type and kinship with family. In which we find most of patient's age between the 18-30, females (57%), married (53%) and belongs to joint (67%) family. We did not apply statistics on the clinical and demographic variables in the terms of examining the impact of OCD symptoms and comorbid. Age range of Patient's and family members was decided between 18to 60 years. Mean score of patients age was found in the study sample was 30.60 years, Family member's age mean score was found 49 years. We observed the patients on the bases of their kinship and we found most of the family members referred by patients were spouses and parents (71%). On the basis of kinship we found that most of the patients were came along with their husband (31.11%) and father (35.55%). Only 8.86% of family members were females.

Table-2 Sociodemographic and clinical characteristics of the family members and patients with OCD (N=45)

		OCD Patients Mean ± SD	Relatives of Mean ± SD		s with OCD	
Age (in years)		$30.6 \pm 7.58$	49 ± 10.7	77		
Age of onset (in n	nonths)	$21 \pm 8.74$				
Gender		%	%			
Female		57.78	08.89			
Male		42.23	91.12			
Marital status						
Unmarried		40.00	02.22			
Married		53.33	95.55			
Remarried		02.22	02.22			
Widower, Divorcees		04.44	00			
		Patients and F	amily members			
Type of family		%				
Joint		64.44				
Nuclear		35.55				
Kinship	Male	%	Female	%	Total	
Parents	Father	35.55	Mother	2.22	37.78	
Spouses	Husband	31.11	Wife	2.22	33.33	
Off springs	Son	15.56	Daughter	4.44	20.00	
Siblings	Brother	8.89	Sister	00	08.89	
	Total	91	Total	8.86	45	100

Table 3 presents there was a positive association between FAS scores and patient results for obsessions, compulsions, DYBOCS total scores. Family accommodation is positively correlated at significant level of 0.05 and 0.01 with YBOCS scores of obsessions (0.413), compulsion (0.607) and YBOCS total score (0.597) subscale of DYBOCS Contamination and cleaning (0.461), Symmetry, Ordering, Counting & Arranging (0.357) On the other hand last one subscale of Aggressive obsessions & related compulsion (-0.382) were found negatively correlated. Sexual and Religious (-0.075), and Miscellaneous (-0.240) were also found negatively correlated with FAS but not at the significant level.

Table 3 – Correlation between Family Accommodation and OCD

Family Accommodation Scale

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Variable	r value	p value					
Contamination & Cleaning	0.461	0.001*					
Hoarding & Collecting	0.120	0.4320					
Compulsions	0.413	0.005*					
Symmetry	0.357	0.01*					
Aggressive OCD	0.382	0.01*					
Sexual & Religious obsessions	0.075	0.622					
Miscellaneous	0.240	0.112					
YBOCS Total	0.597	0.006*					

\*significant (Pearson's correlation used in the statistics)

### DISCUSSION

In this study, a sample of 45 adult patients with OCD and their family members was examined for the level of FA in family and its association with severity and dimensions of OCD, As expected, accommodating behaviours were highly prevalent among the family members studied: 97.45% stated that they provide accommodation to patients' OCD behaviours. The accommodating behaviours most frequently presented on a daily basis. These results are similar to those of previous studies [14-15] and, again, confirm that very often family members engage in some form of accommodation of OCD symptoms.

Family accommodation includes behaviours such as helping the patients by family member and feeling obliged to assist a patient with OCD, when he/she is performing a ritual or respecting the rigid rules that OCD imposes on the patient [16]. Family accommodation has been identified as a key maintaining factor of OCD [17-19]. OCD symptoms have a strong impact on the dynamics of family and caregivers [20].

In our study we found moderate correlation between severity of OCD and family accommodation, which suggests that as symptoms increase in severity, the family members are more likely to accommodate with the patients [21-22]. The dimensions of contamination & cleaning, are found to be mildly correlated with family accommodation which indicates as the severity of the dimensions increases, the family members are more likely to accommodate with the patients. These finding are supported by other studies [23]. The dimensions of Symmetry, Ordering, Counting & Arranging are found to be correlated but not at the significant level with family accommodation which indicates as the severity of the dimensions increases, the family members are more likely to accommodate with the patients [23].

As we found in the current study OCD-affected individuals often explicitly request or demand accommodation [3]. Therefore, it can be said that those symptoms which were explicit in nature as well as acceptable for family members, were found to be positively correlated with family accommodation [23]. Family accommodation inadvertently worsens OCD symptoms and is associated with increased disease severity, overall functioning impairment for the child or adult both [24].

In the current study a negative correlation is found between the dimension of Injury, violence, aggression, natural disaster related compulsions, aggressive obsessions & related compulsions and sexual/religious obsessions with family accommodation, which indicates that as severity of the dimensions increases, the family members do not accommodate with the patients. These symptoms are implicit symptoms, unacceptable and as well as negative in nature therefore family members do not accommodate with patients. It can be a reason of less or no accommodation found with respect to these dimensions [23].

# **CONCLUSION**

The present study replicated the high prevalence of FA among family members of OCD patients. The results of the correlation with family accommodation indicated that patient's OC symptom severity, as well as the presence of OC symptoms, such as washing or cleaning and symmetry, ordering and arranging in family members, increases the severity of illness or vice versa may possible.

**Limitations and suggestions of the present study**: The family members assessed were referred by patients, and may therefore have been the ones with the highest accommodation levels among all family members. Future research examining family factors associated with FA before and after the psychotherapeutic interventions are recommended.

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