ORIGINAL ARTICLE

RELIGIOSITY AND STRESS AS PREDICTORS OF SEVERITY OF OCD, AND DIFFERENCE IN MARITAL ADJUSTMENT OF OCD AND NON-OCD INDIVIDUALS

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ABSTRACT

OBJECTIVE
To find the determinants of severity of Obsessive Compulsive Disorder in OCD patients and to assess the difference in the Marital Adjustment among OCD and Non-OCD Individuals.

STUDY DESIGN
Cross-sectional Research Design

PLACE AND DURATION OF THE STUDY
Department of Psychology, GC University, Lahore, from September 2015 to August 2016.

SUBJECTS AND METHODS
The sample consisted of 120 individuals (Men=60 and Women=60). Out of which, 60 individuals were diagnosed with Obsessive Compulsive Disorder, and they were compared with 60 individuals having no history of psychiatric illness. Measures of Clarke-Beck Obsessive-Compulsive Inventory, Short Muslim Practice and Belief Scale, Perceived Stress Scale, Marital Adjustment Test and demographic data sheet were used.

RESULTS
Significant correlations were found between stress and severity of the Obsessive Compulsive Disorder ($r=.557$, $p<.001$) and between religiosity and severity of the Obsessive Compulsive Disorder ($r=.732$, $p<.001$). Results of the Step-wise regression analysis supported our hypothesis model, as stress and religiosity appeared to be the significant predictors of Obsessive Compulsive Disorder ($R^2=.58$). Mean difference in the marital adjustment scores indicated that OCD patients had significantly lower marital adjustment than the non-Patient sample.

CONCLUSION
Religiosity and stress appeared to significantly determine the severity of obsessive-compulsive disorder. The results suggest that working on the religiosity and stress of OCD patients may improve the chances of their prognosis of illness.

KEY WORDS
Obsessive-compulsive disorder, Patients with OCD, Psychiatric illness, Stress

INTRODUCTION

Obsessive Compulsive Disorder (OCD) is much more common among psychiatric illnesses. World Health Organization reported that Obsessive Compulsive Disorder is the tenth most disabling medical condition throughout the world.[1] It is the 50 to 100 times more popular than it was assumed initially[2].Prevalence of OCD is reported 3% in Pakistan.[3]

Obsessive Compulsive Disorder is a psychological disorder in which a person has unwanted, intrusive thoughts, images or ideas that are disturbing for him/her (Obsessions) and in order to reduce this distress or anxiety, that person has the urge to perform ritualistic behaviors or mental acts and prevent himself from any dreaded event(Compulsions).[4]

The OCD appears to be more popular in people who follow strict and rigid religious beliefs.[5,6] Individuals with higher levels of religiosity are at increased risk of meeting criteria for OCD.[7, 8] An indigenous research conducted to explore the role of religious themes in Obsessive Compulsive Disorder revealed that religion plays a critical role in the development of obsessive-compulsive disorder.[9] A plethora of international studies reported a positive relationship between religiosity and severity of obsessive-compulsive symptoms.[7,10]

Some environmental factors such as stressful events are also responsible for the onset of the OCD symptoms[11,12] and its symptoms get severe in the hours of stress.[13] Greenberg, Carr, and Summers[14] referred psychological stress as caused by "real or perceived challenges to an organism's ability to meet its real or perceived needs" Less severe stress might be useful, but when it reaches extreme in severity, detrimental effects on the daily lives have been encountered.

In order to show the relationship between stress and obsessive-compulsive disorder, Steketee and Barlow[15] generated a model which indicates that stress due to life event like the death of a near one results in intrusive thoughts, images or impulse. It will, in turn, leads to a specific psychological vulnerability, which will cause anxiety and in order to neutralize those thoughts, certain cognitive and behavioral rituals like praying, counting, rechecking are performed. Hence, it would result in obsessive-compulsive disorder.[16]

A study reported that patients with obsessive-compulsive disorder report significantly higher levels of stress than healthy individuals.[17] Another research investigated the predictive value of familiarity, stressful life events and gender on the course of obsessive-compulsive disorder. The findings were based on the cross-sectional data, and the results revealed that the stressful life event had a significant relationship with obsessive-compulsive disorder.[18]

The OCD has a high clinical relevance that leaves a deep impact on the life of the patient and his caretakers. A theory of marital quality developed by Lewis and Spanier[19] indicated that the level of individual distress experienced by even one member of a couple had a negative impact on their marital adjustment. For instance, if an individual has more severe OCD symptoms, then it would negatively affect his marital life. This theory predicts that if OCD symptoms are reduced, it would be accompanied by an improvement in marital functioning.

Patients with the obsessive-compulsive disorder are prone to marital issues due to loss of sexual intimacy caused by the obsessive-compulsive symptoms.[20,21] Sexual avoidance is found in a large number of patients with an obsessive compulsive disorder which could, in turn, affect their marital life.[22] All aspects of quality of life are markedly affected in individuals with obsessive-compulsive disorder and are associated with severity of obsessive-compulsive disorder and depression.[23] However, if an OCD patient has a helping and caring partner, then it could minimize the severity of OCD symptoms.[24]

To study the determinants and consequences of the obsessive compulsive disorder is an emerging area in clinical psychology. The obsessive compulsive disorder is studied in different contexts, but the impact of religiosity is a somewhat new field, little research work has been undertaken on it. In Pakistani culture, religion has a very strong impact on people's lives as the Islamic religion has some cleaning rituals which may turn into obsessive-compulsive disorder.[9] Moreover, when one tries to figure out the impact of stress on obsessive-compulsive disorder, very little or no research is carried out as yet. Pakistani people have somewhat more stressful events in life like terrorism on a national level which could have an impact on people's mental health. Furthermore, although it is an acknowledged fact that obsessive-compulsive disorder has a negative effect on the marital adjustment, yet there is a lack of empirical studies on this effect, so this area requires extensive research work and attention. This study intends to fill the gap in literature, so that the determinants and consequences of the severity of obsessive-compulsive disorder would be highlighted in an indigenous perspective.

The objective of the study was to investigate the strength of religiosity and perceived stress to predict the severity of Obsessive-Compulsive Disorder and also to assess the difference in the marital adjustment of the OCD patients and non-patient individuals.

SUBJECTS AND METHODS

Participants

A sample of 60 obsessive-compulsive disorder patients (30 men and 30 women) were recruited from out-patient department of different hospitals of Lahore. Their age ranged from 25 to 65 years (*M*=44.66, *SD*=9.40). For the non-patient sample, 60 individuals (30 men and 30 women) comparable to patient sample in age, education and socio-economic status, having no history of psychiatric illness was conveniently selected from Lahore city. The sample comprised of married individuals. Minimum duration of data collection was two months. Sample was decided to be 100 in each sub-groups by following the criteria for survey research in social sciences provided by Borg and Gall (as cited in Cohen, Manion, & Morrison., 2000, p. 93).[25] but due to time constraint and low number of the patients who consented to participate in the study, we could include 60 participants in each group as suggested by Borg and Gall.

Instruments

The severity of the Obsessive Compulsive Disorder was measured with the Clarke-Back Obsessive-Compulsive Inventory.[26] It has two subscales: obsession and compulsion. Obsession subscale has 14 items with .90 as an alpha coefficient, and Compulsion subscale has 11 items with .93 as an alpha coefficient. Hence, the total number of items in Clarke-Beck Obsessive Compulsive Inventory is 25 with .80 alpha coefficient.

Religiosity was measured by the Short Muslim Practice and Belief Scale. Ghayas and Batool[27] translated and validated this scale to develop a linguistically accurate Urdu version. It has two subscale: practice and belief subscale. Practice subscale has nine items with .80 alpha coefficient, and Belief subscale has 20 items with .70 alpha coefficient. A total number of items on this scale are 29 with .78 alpha coefficient.

Cohen[28] developed Perceived Stress Scale to assess the degree of stress. A total number of items in perceived stress scale is 10 with .72 alpha coefficient.

Marital Adjustment was measured by the Locke and Wallace marital adjustment test.[29] It has 15 items with .90 alpha coefficient and .63 validity. It contains one global adjustment question, eight-question which measures possible areas of disagreement and six questions measuring conflict resolution, cohesion, and communication. Its scores range from 2 to 158. The higher score indicates better marital adjustment and satisfaction.

Procedure

After the approval of the topic from the board of studies (BOS) of Psychology Department Government College University, Lahore, data collection was initiated. Permission was taken from the heads of a psychiatric ward for data collection. Before data collection, consent was taken from the subjects. The Marital Adjustment Test (MAT) and Perceived Stress Scale (PSS) was translated and adapted for the assessment of marital adjustment and perceived stress among Pakistani patients, after the permission taken from the authors of original versions. These research tools were forward and backwards translated through a committee of bilingual experts. The best items were selected for the final Urdu versions of these scales. Both Urdu and English versions of the PSS and MAT were completed by the people (n=46) who could understand these questionnaires. Correlations appeared as (r=.97, .97, p<.000) between the English and forward translated version; English and backwards translated version of the MAT. Similarly, the correlations appeared as (r=.75, .64, p<.000) between the English and forward translated version; English and backward translated version of the PSS. The scales used for this study were found to be valid and reliable with the opinion from the judges. Patients of the Obsessive Compulsive Disorder were approached after contacting the outpatient psychiatry of the three hospitals of Lahore: Mayo, Services and Ganga Ram Hospital. On the other side, tests were also administered to a sample of 60 non-patients having no psychiatric illness. A purposive sampling technique was used to select the non-patient sample comparable to the sample of OCD patients in age, education, socio-economic status etc. Those who had no history of psychiatric illness were included. For analysis of the data, Statistical Package for Social Sciences (SPSS) was used

RESULTS

Sample of the study consisted of 120 individuals (60 non-OCD and 60 OCD individuals). Among them 60 were men and 60 were women. All participants were married. Majority of the participants were living in a nuclear family system (n=108), and only few were living in a joint family system (n=12). Pearson's correlation analysis was run to test the hypothesis. Results shown in Table 2 indicate that severity of Obsessive Compulsive Symptoms positively correlate with Religiosity (r=.732, p<.001), and Perceived Stress (r=.557, p<.001)..

Table 1
Demographic Characteristics of the sample (N=120)

Variable	*f*	%
OCD	60	50.0
Non-OCD	60	50.0
Gender		
Male	60	50.0
Female	60	50.0
Profession		
Non-Working	55	45.8
Working	65	54.2
Education		
Uneducated	6	5.0
Primary	11	9.2
Middle	21	17.5
Matric	17	14.2
Intermediate	26	21.7
Graduation	36	30.0
Post-graduation	3	2.5
Family System		
Joint	12	10
Nuclear	108	90

Note: f= Frequency, %= Percentage

Table 2
Inter-correlation among Clarke-Beck Obsessive-Compulsive Inventory, Marital Adjustment Test, Short Muslim Practice and Belief Scale and Perceived Stress Scale (N=60).

Variable	1	2	3	4
1. Clarke-Beck Obsessive Compulsive Inventory	-	.213	.732**	.557**
2. Marital Adjustment Test	-	-	.094	.299*
3. Religiosity	-	-	-	.533**
4. Perceived Stress Scale	-	-	-	-

Note: *p<.05, **p<.01

In order to predict the strength of Stress and Religiosity on the severity of Obsessive Compulsive Disorder, stepwise regression was used. In addition to Stress and Religiosity, demographic variables (viz., gender, profession, education and family system) were also entered in the regression analysis. Table 3 indicates the results of a step-wise linear regression to predict the significant impact of Stress and Religiosity on the severity of symptoms of Obsessive Compulsive Disorder. In model 1, the analysis of the data reveals that out of all the variables entered in the regression analysis, Religiosity appears to have the most salient impact on Obsessive Compulsive Disorder, $F(1, 59) = 66.97, p<.001$. Result indictes that 53.7% variance in Obsessive Compulsive Disorder is accounted for Religiosity ®^{2}= .537). In the second model, results reveal that both religiosity and stress emerge as significant predictors of obsessive-compulsive disorder $F(2, 59)=38.53, p<.001$, Results show that 57.5% variation in obsessive-compulsive disorder is accounted by a combination of these factors (R^2= .537). Results indicate that religiosity and stress had a positive relationship with the severity of obsessive compulsive disorder. No demographic variable appeared to significantly predict severity of OCD.

Table 3

Stepwise Regression Analysis of Severity of Obsessive Compulsive Disorder (N=60)

Model	*B*	*SE*	β	*t*	*p*
Model 1					
Religiosity	.33	.040	.73**	8.18	.000
Model 2					
Religiosity	.27	.046	.608**	5.95	.000
Stress	.310	.136	.233**	2.285	.026

Note: *p<.001

Independent sample t-test was run to find group differences; results indicate that Non-OCD (M=105.23, SD=27.67) and OCD (M=90.52, SD=5.05) differ significantly on marital adjustment, t (118) =15.2, $^{**}p$=.001 and the mean scores show that Obsessive Compulsive Disorder patient have lower Marital Adjustment as compared to non-patient population. As the scores of OCD group is below the cut-off point= 100 (i.e., M= 90.52), which indicates maladjustment in the marital life of OCD patients. [29]

Table 4

Mean Differences on the Marital Adjustment Scores between OCD and Non-OCD Individuals (N= 120)

Variable	Non-OCD (*n=60*)		OCD (*n=60*)				*CI*		Cohen's d
	M	*SD*	*M*	*SD*	*t*(118)	*p*	*LL*	*UL*	
Marital Adjustment	105.23	27.67	90.52	8.05	4.28**	.001	48.09	62.48	. .53

DISCUSSION

The current research was an endeavor to investigate the determinants of severity of Obsessive Compulsive Disorder among OCD Patients, and to investigate the significant difference on Marital Adjustment in OCD and non-OCD Individuals. In this study, it is revealed that stress and religiosity could contribute to the severity of the Obsessive Compulsive Disorder. Moreover, the marital adjustment of the patient and non-patient sample also differed significantly. Pearson correlation analysis was run to see the correlation of the severity of Obsessive Compulsive Disorder with stress, religiosity and marital adjustment (See Table 2). The findings supported the hypothesis that the severity of obsessive-compulsive disorder has a significant positive relationship with religiosity. The results are in line with the previous studies that reported that religious beliefs influenced the severity of OCD.[7, 8] Religion, particularly Islam which has some cleaning rituals like ablution (washing particular parts of the body) five times a day may result in obsessive thoughts and compulsive actions. Sometimes, people feel that they have not performed the cleaning rituals properly, so they are obsessed to wash hands etc. again and again, and this obsession results in compulsive repeated washing ritual. Local research conducted in the Department of Psychiatry at the Lady Reading Hospital and Khyber Teaching Hospital Peshawar revealed that religion gave content to the different compulsions and obsessions.[9]

The significant positive correlation between stress and severity of OCD appeared in the current study; this is in accordance with the previous studies like an international research report that OCD patients experience more stress from the daily activities than the normal individuals and ultimately the stress contributes to the severity of the OCD,[17] and that presence of one or more distressing life events is associated with OCD severity.[11, 12] Moreover, this result corroborates the Steketee and Barlow's model[15] which indicated that the stressful life events could trigger the obsessive-compulsive disorder.

Religiosity was observed as stronger predictor of the severity of Obsessive Compulsive Disorder symptoms than stress. Since this study was conducted in Pakistan where majority of the population follow Islamic religion, and this religion is believed to be more ritualistic, so sometimes it can boost the symptoms of OCD.[9] Moreover, Muslims also struggle for salvation by following strict rules and rituals such as ablution (washing particular body parts) five times a day and regular prayers in specific numbers. It is in line with the claim that rigid religious beliefs may make a person meet the diagnosis of Obsessive Compulsive Disorder.[5,6]

There was a significant mean difference in the marital adjustment of the OCD and non-OCD individuals(see Table 4). Obsessive Compulsive Disorder is linked to the marital problems which can ultimately negatively impact on the marital relationships. Marital life of patient with obsessive-compulsive disorder is affected, mostly due to the absence of intimacy caused by the OCD symptoms.[22]. Moreover, results are in line with the previous researches which revealed that Obsessive Compulsive Disorder is a risk factor for sexual problems in women which in turn can affect the

intimate relationship within the marital life.[20] These findings support the 'marital quality theory'[19], which reveal that the severe OCD symptoms of an individual could produce adverse effects on his/her marital life. Exploring the determinants of Obsessive Compulsive Disorder could contribute a lot to the literature. Stress and religiosity are the factors, which were ignored to a larger extent in the previous studies. This study highlighted the role of stress and religiosity in the severity of obsessive-compulsive disorder, which could assist in the early diagnosis of the OCD in the Pakistani culture.

Like every other study, this research also had some limitations. Firstly, the results of the study cannot be generalized as the sample size was small and comprised of the hospitals from a single city only. Therefore, a larger and more representative sample should be recruited from the different cities and provinces of Pakistan in the future studies. Moreover, this research used self-report measures, which increase the risk of faking among the participants while filling up the questionnaires. As the study was carried out as an academic project, and the time designated for completing the data collection was too short to get a larger sample.

CONCLUSION

Religiosity and stress are significant determinants of the severity of obsessive-compulsive disorder. The results suggest that working on the religiosity and stress of OCD patients may improve the chances of their prognosis of illness.

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