RESEARCH ARTICLE

FAMILY ACCOMMODATION, CAREGIVER BURDEN ANDPSYCHOLOGICAL DISTRESS IN FAMILY MEMBERS OF PATIENTS WITH OBSESSIVE COMPULSIVE DISORDER

***Maria Zaheer*[*]*, Rukhsana Kausar*[**]*, Ayesha Farooq*[**]**

[*]Department of Psychology, Virtual University of Pakistan. Lahore, Pakistan;
[**]VC, Govt. College Women University, Sialkot, Pakistan.

Abstract

Psychological disorders affect the life of both patients and their family members. Family members of psychological patients play a vital part in treatment and intervention of patients suffering from psychological problems. Their support may facilitate the patient in treatment as well as on the other hand may contribute to exacerbation. However, such family members also suffer while dealing with their relatives who suffer from psychological disorders. Therefore, this study is intended to find out how family accommodation causes impairment in treatment of Obsessive-Compulsive Disorder (OCD) patients, to measure the burden of care (in terms of six dimensions *i.e.*, financial burden, disruption of family routine, disruption of family leisure, disruption of family interaction, effect on physical health of others and effect on mental health of others) and to determine the level of psychological distress in family members of OCD patients. The present correlational research was consisted of 120 family members (42 men, 78 women), who were the primary caregivers. Result of Pearson Product Moment Correlation showed a highly significant positive relationship between family accommodation, caregiver burden and psychological distress. Mediation analysis was done using process which showed that caregiver burden mediated the relationship between family accommodation and psychological distress. Family interventions regarding accommodation by family members can be provided in order to improve the patient treatment and research findings can also be implied to teach coping strategies to family members in order to deal the burden they experienced. ***ASEAN Journal of Psychiatry, Vol. 22(9), November 2021: 1-8***

Keywords: Family Accommodation, Caregiver Burden, Psychological Distress, Obsessive Compulsive Disorder (OCD)

Introduction

Obsessive-Compulsive Disorder (OCD) has been found to be the 10th leading cause of disability among all medical conditions. Clinical observations suggest that family members of OCD patients are involved in the patients' rituals, impairing their own life. The purpose of

the present study was to find out the relationship between Family accommodation, Caregiver burden and psychological distress in families of patients with OCD in Pakistan.

A significant and under-research relational phenomenon that mostly occurs in response to OCD, as well as negatively affects the duration, intensity and management of OCD is the family accommodating behaviors.

Many aspects have been related to the outcome of OCD and one such factor that has been the focus of increasingly growing interest is the role of Family Accommodation (FA) [1].

Family accommodation prevalent in family members of individuals with OCD and it is defined as the involvement of family members in patient's compulsions and modification in family member's behavior which is aimed at assisting the patient to overcome anxiety Lebowitz et al.

Obsessions and compulsions had worse influence on personal life quality of relatives of people suffered from obsessions and compulsions.

However, the results propose that specialists' assistance for family members should be emphasized not merely to carefulness regarding patient rather on their family members.

Accommodating behavior by family member is theoretically an imperative goal for enlightening management in obsessions and compulsions and other investigative clusters wherever accommodating behavior usually happen [2].

Obsessions and compulsions frequently focus on actions related to routine life like consumption, washing and in community, thus the illness may be particularly disturbing for the person who was suffering from OCD as well as relatives working.

The family members were certainly strained into actions like compulsions and escaping through accommodating behaviors, a process which involves some modifications in relative's actions directed to inhibit and decrease individual's distress in relation to obsessions and compulsions, or to decrease the time spent ritualizing.

The proportion of accommodating behavior is greater, with information taking as of family members of adolescent as well as grown-up patients within range of 62% to 100% [3].

Though, such relative reactions preclude the patient from challenging his obsessive beliefs as well as distress which he aggravates.

While it might be at a certain degree calmer for the relative to purpose temporary and it eventually take part in maintaining the person's obsessions and generates an accelerating circle among accommodating actions as well as obsessive thoughts.

Moreover, accommodating actions overcome the normal results of obsessive and compulsive actions and potentially reducing patients' motivation for change [4].

Moreover, this study will provide recommendations to put emphasis on the necessities of caretakers and also highlight public carefulness for psychologically ill patients as well as family intervention.

Hence, this study is intended to predict how family accommodation causes caregiver burden and psychological distress in family members of patients with OCD and to provide research-based evidence on family accommodation,

caregiver burden and psychological distress in family members of patients with Obsessive Compulsive Disorder in Pakistan as few studies found on this topic in Pakistan (Figure 1).

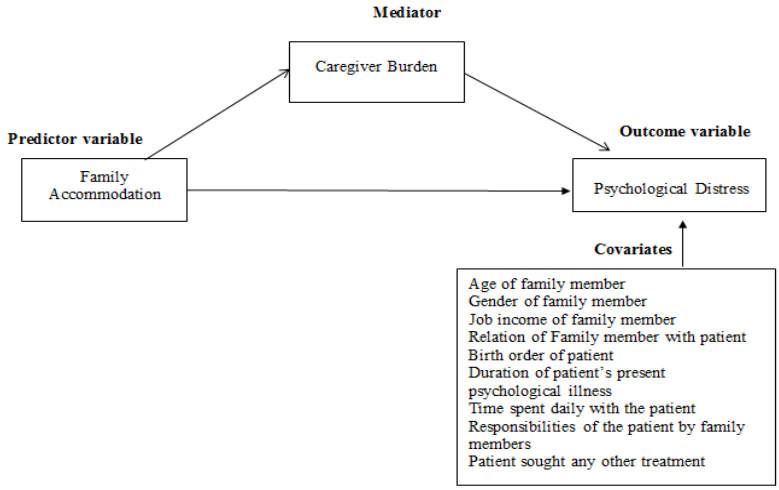


Figure 1: Proposed model of family accommodation as predictor of age of family member, gender of family member, income of family member, relation of family member with patient, birth order of patient, duration of patient's present psychological illness, time spent daily with the patient, responsibilities of the patient by family member, patient sought any other treatment as covariates, Caregiver burden as mediator and psychological distress as outcome variable in family members of OCD patients.

Methods

Research design

A correlational research strategy employing within group research design was used in the present study.

Sample

A non-probability purposive sampling strategy was utilized to draw a purposive sample consisted of 120 participants who were the family members of patients diagnosed with OCD. The sample recruited was within the age range of 18-58 years (M=37.19, SD=10.34), while the patients were within the age range of 18-50 (M=28.82, SD=9.92).

The sample was collected from outdoor of Psychiatry departments of different Government Hospitals (Jinnah, Sir Ganga-Ram, Services, Mayo, and General) and Private Hospitals (centre for clinical psychology, University of the Punjab and Fatima Memorial) of Lahore.

Inclusion criteria

Patients having primary diagnosis of OCD for at least 1 year and diagnosis is confirmed by DSM-5 checklist. Inclusion criteria for the family members include family members such as parents, spouse, siblings or children having age18 years and above, who has been living with the patient for at least 1 year.

Exclusion criteria

Patients having secondary diagnosis of OCD were excluded. Family members who suffered from any past psychiatric illness and severe Physical illness were excluded. Moreover, older

family members and those family members who had more than one patient to be taking care of were excluded.

Assessment Measures

Demographic information sheet

Demographic information sheet was developed by the researcher which consisted of two parts. One was related to collect information related to participants and other was related to collect information regarding OCD patient.

Both information's were collected from family members which include age, gender, education, occupation, religion, marital status, no. of children, no. of siblings, birth order, family setup, general home atmosphere, monthly income, relation of family member with the patient, physical and psychological illness of the participant.

The demographic information sheet also involved questions such as family member's duration of living with the patient, duration of patient's present psychological illness, time spent daily with the patient, responsibilities of the patient by family members and patient other treatment options.

Family accommodation scale for obsessive compulsive disorder self-rated version (FAS-SR; Pinto et al. 2012, translated by Naz et al. 2013)

This employing a 5-point Likert scale measuring the frequency of the accommodating behaviors in the past week (None, 1 day, 2-3 days, 4-6 days, Everyday). The tool has brilliant internal reliability (Cronbach's α=0.90).

This has high reliability for items ranged from 0.75 to 0.99 and excellent convergent validity with assessment of symptom severity, functioning of family and family members refusing attitudes towards participant [5].

Family burden interview schedule (FBIS; Pai & Kapoor, 1981, translated by Nasr & Kausar, 2008)

It is a semi-structured conversation that has six measurements (financial burden, disruption of family routine, disruption of family leisure, disruption of family interaction, effect on physical health of others and effect on mental health of others) and comprises of 25 items, every ranked on a three-point scale with a total maximum score of 50 and minimum of 0.

Internal consistency for the full scale as measured by the alpha coefficient is 0.81. The reliability and validity were found to be 0.87 and 0.72 respectively.

The obtained scores were converted into standard score to entertain disparity in scores because of unequal quantity of items in different subscales or categories.

Kessler psychological distress scale (K-10; Kessler et al. 2002, translated by Ghafoor et al. 2010)

It is a 10- item uni-dimensional tool assesses in what way respondents experienced anxiety and depressive symptoms (e.g., tenseness, sorrow, agitation, desperateness, worthlessness). Each item is rated from 1 (none of the time) to 5 (all of the time) and the full score is used as a key of psychological distress. The scale has established brilliant internal constancy and reliability (Cronbach's α=0.89).

Procedure

First of all, written consent to use instruments was taken from the authors before conducting data collection. Then consent was taken from authors who have done Urdu translation of

original tools.

After taking permission, written permissions for data collection were sought from the Head of Psychiatry departments of Government and Private Hospitals for collecting data from their institutions.

Prior to study, the participants were given debriefing about the nature and purpose of the research through participant information sheet. Participants were assured of confidentiality and anonymity in the information sheet. Written consent was taken from the participants as an ethical responsibility.

Furthermore, the research participants were also told about their right to withdraw from the study at any point in time. After completion of questionnaire, the participants were psycho-educated about symptoms, causes, duration, prognosis and treatment of OCD.

Results

Pearson Product Moment Correlation was run to find out the relationship between family accommodation, caregiver burden and psychological distress. The results revealed a significant positive relationship between family accommodation, caregiver burden and psychological distress in family members of OCD patients.

Furthermore, there is a significant positive correlation of family accommodation with all types of family member burden except for effect on mental health of others, which depicts that high level of family accommodation is correlated with high level of caregiver burden in family members of OCD patients.

It has also been found that there is a significant positive correlation of all types of caregiver burden with psychological distress, which means that as the family burden increases, psychological distress also increases.

Moreover, it has been found that there is a significant positive correlation of family accommodation with psychological distress. Table 1 presents the correlation between these variables and demographics.

Table 1. Pearson product moment correlation showing relationship of family accommodation, caregiver burden and psychological distress in family members of OCD patients (n=120)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
AgeFM	-	-.34**	-0.12	0.07	0.09	-0.1	-.74**	-0.07	0.1	.31**	0.07	-0.06	0.11	-0.02	.21*	.22*
EduFM		-	.19*	.18*	.41**	0	.33**	.37**	-.34**	-.49**	-,22*	0	-0.15	0.03	-.20*	-.34**
EduPt			-	0.16	0.23	0.1	0.06	.20*	-0.17	-.29**	-0.13	0.01	-0.05	-0.15	-0.12	-.43**
BOPt				-	0.12	0	0.13	0.02	-0.08	-0.1	-0.06	0.15	-0.03	0.02	0.03	-.21*
JIFM					-	.31*	0.12	.33*	-.27*	-.36**	-0.21	0	-0.21	0.05	-0.07	-.30*
PsyillF						-	0.16	0.13	-.22*	-	-	-	-	-	-	-

M										.29**	0.16	.25**	.30**	.29**	.27**	.18*
RelWithPt							-	0.11	-.25**	-.27**	-0.07	0.02	-.23**	0.01	-.30**	-.25**
PtOT								-	-.24**	-.30**	-.31**	-.22*	-.19*	-0.03	-0.13	-.36**
FA									-	.45**	.53**	.30**	.45**	.26**	0.15	.48**
FB										-	.46**	.27**	.39**	.23**	.37**	.53**
DOFR											-	.60**	.54**	.34**	0.13	.43**
DOFL												-	.53**	.44**	0.13	.19*
DOFI													-	.53**	.42**	.40**
EOPH														-	.45**	.28**
EOMH															-	.34**
PD																-

*AgeFM: Age of family member, EduFM: Education of family member, EduPt: Education of Patient, BOPt: Birth Order of Patient, JIFM: Job income of family member, PsyillFM: Psychological illness of family member, RelWithPt: Relationship with Patient, PtOT: Patient other treatment, FA: Family accommodation, FB: Financial burden, DOFR: Disruption of family routine, DOFL: Disruption of family leisure, DOFI: Disruption of family interaction, EOPH: Effect on physical health of others, EOMH: Effect on mental health of others and PD: psychological distress, *: p <0 .05; **: p < 0.01; ***: p <0.001*

The next hypothesis was that caregiver burden would mediate the relationship between family accommodation and psychological distress in family members of OCD patients.

This hypothesis was tested through Mediation analysis which was carried out by using macro-process [6].

Process is a tool for computing path-analysis based mediation. It uses Ordinary Least Square (OLS) regression for estimating direct and indirect effects.

Mediation analysis was done with psychological distress as outcome variable. The analysis was carried out by following steps of mediation by Hayes:

1) The predictor X must predict outcome variable Y in first place (path c).
2) The predictor X must predict mediator M (path a).
3) The mediator M must predict outcome variable Y (path b).
4) The relationship between predictor X and outcome variable Y should be smaller when mediator M is included in the model as compared to when it is not (path c).

First of all, family accommodation was used as predictor, caregiver burden was

used as mediator and psychological distress was used as outcome variable.

The control variables in mediation test were age, family member income, education and psychological illness of family member and education, birth order of patient and patient seeking some other treatment.

Table 2 shows the results of mediation analysis with psychological distress as outcome.

Table 2. Direct pathways between family accommodation and caregiver burden with psychological distress (n=120)

Direct Paths							
	M1	**M2**	**M3**	**M4**	**M5**	**M6**	**Y (PD)**
	B	**B**	**B**	**B**	**B**	**B**	**B**
X (FA)	0.29***	0.27***	0.12***	0.22***	0.07***	0.01	0.26***
M1(FB)	-	-	-	-	-	-	0.19***
M2 (DOFR)	-	-	-	-	-	-	0.2
M3 (DOFL)	-	-	-	-	-	-	-0.13
M4 (DOFI)	-	-	-	-	-	-	0.03
M5 (EOPH)	-	-	-	-	-	-	0.09
M6 (EOMH)	-	-	-	-	-	-	0.44
Control variables							
Age of family member	0.27**	0	-0.03	-0	0	-0.02	0.21
Relationship with Patient							
Father	3.89	5.91***	5.32**	0.71	0.54	-0.07	1.01
Husband	-1.21	-2.48	2.69	0.51	2.83**	-0.83	2.28
Wife	-1.77	-1.57	5.29***	-1.3	-0.2	-2.26**	-1.74
Daughter	-0.75	-0.49	5.53	-0.3	1.18	-1.4	1.6
Sister	1.96	1.72	0.75	-5.1	0.57	-2.68**	1.88
Brother	7.65	6.21	3.18	1.3	2.89	-2.99**	4.77
Patient Birth order							
First Born	1.01	-0.01	-1.49	-0.2	0.55	-0.8	-0.64
Last Born	-4.16	-0.62	1.7	-0.3	0.42	-0.38	-5.90***
Only one child	11.34	-3.92	0.36	-0.3	1.86	2.46	-1.75
	R^2 = 0.36	R^2=0.40	R^2=0.26	$R^{2=}$.25	R^2 =0.16	R^2 =0 .17	R^2 =0.48

X: Predictor, M: Mediator, FA: Family Accommodation, FB: Financial Burden, DOFR: Disruption Of Family Routine, DOFL: Disruption Of Family Leisure, DOFI: Disruption Of Family Interaction, EOPH: Effect On Physical Health of others, EOMH: Effect On Mental Health of others. **: p<0.05,* ***: p<0.01,* ****: p<0.00*

The step-wise results of mediation analysis for psychological distress as outcome variable are described as follows:

It was found that family accommodation significantly predicts financial burden, disruption of family routine, disruption of

family leisure, disruption of family interaction, effect on physical health of others and psychological distress. When caregiver burden is not in the model, family accommodation significantly predicts psychological distress, B=0.26, p=0.000.

After controlling the effect of age of family member, relationship of family member with patient and birth order of patient, the model was still significant. It was also found that family accommodation significantly predicted all types of family burden except effect on mental health of others.

Financial burden was significantly predicted by family accommodation (B=0.29, p=0.000) and the model was significant F (11.0, 108.0)=6.12, p=0.000 and R^2=0.48.

Disruption of family routine was significantly predicted by family accommodation (B=0.27, p=0.000) and the model was significant F (11.0, 108.0)=12.42, p=0.000 and R^2=0.40.

Disruption of family leisure was significantly predicted by family accommodation (B=0.12, p=0.000) and the model was significant F (11.0, 108.0) =6.12, p=0.000 and R^2=0.26. Disruption of family interaction was significantly predicted by family accommodation (B=0.22, p=0.000) and the model was significant F (11.0, 108.0)=5.06, p=.000 and R^2=0.25.

Effect on physical health was significantly predicted by family accommodation (B=0.07, p=0.000) and the model was significant F (11.0, 108.0)=2.00, p=0.000 and R^2=0.16.

Effect on mental health of others was not significantly predicted by family accommodation as (B=0.01, p=0.43) and the model was not significant F (11.0, 108.0)=3.04, p=0.10 and R^2=0.17.

All these findings indicate path ‘a’ of mediation and reflect that when family accommodation increased, all the subtypes of family burden also increased, expect for the effect on mental health of others.

Secondly, the mediation showed relationship of caregiver burden (M) and psychological distress (Y). Only financial burden significantly predicted psychological distress in family members of OCD patients as (B=0.19, p=0.01) and the model was significant F (17.0, 102.0)=9.82, p=0.01 and R^2=0.48.

The indirect effect of family accommodation on outcome variable describing the results of mediation is given in (Table 3).

Table 3. Indirect effect of family accommodation on psychological distress through caregiver burden (n=120)

	Indirect effect			
		Y		
	B	**z**	**LLCI**	**ULCI**
M1(FB)	0.05	2.15**	0.01	0.1
M2 (DOFR)	0.05	1.39	-0.01	0.14
M3 (DOFL)	-0.01	-0.76	-0.06	0.01
M4 (DOFI)	0	0.32	-0.03	0.06
M5 (EOPH)	0	0.32	-0.02	0.04
M6 (EOMH)	0	0.56	0	0.04

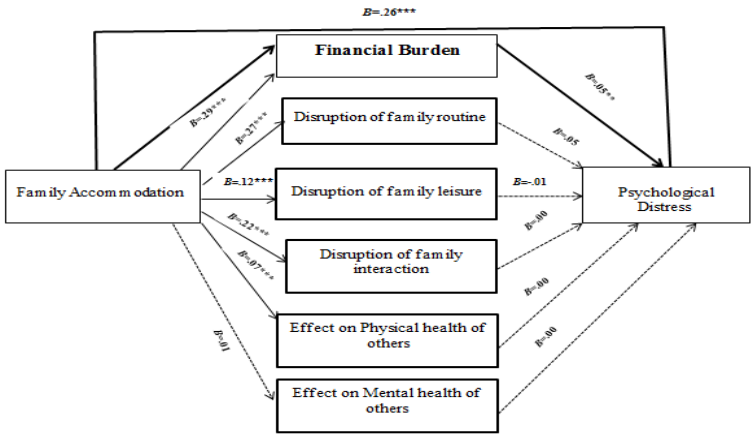
M: Mediator, Y: Outcome variable, FB: Financial Burden, DOFR: Disruption of family routine, DOFL: Disruption of family leisure, DOFI: Disruption of family interaction, EOPH: Effect on physical health of others, EOMH: Effect on mental health of others. LLCI: Lower limit Confidence interval and ULCI: Upper limit Confidence Interval.

Table 3 shows indirect effect of family accommodation (X) on psychological distress (Y), when mediator caregiver burden was also included.

There is a significant indirect effect of family accommodation on psychological distress through financial burden, B=0.05, z=2.15, p=0.03.

The results of Sobel z test also confirmed mediating role of financial burden between family accommodation and psychological distress (B=0.02, z=2.15, p=0.03).

While there is a non-significant indirect effect of family accommodation on psychological distress through disruption of family routine, disruption of family leisure, disruption of family interaction, effect on physical health of others and effect on mental health of others.



*Note: Pathways of family accommodation and caregiver burden with psychological distress. indirect effect of financial burden: B=0. 05**, 95% CI (0.01, 0.1).*

Figure 2: Financial burde

Discussion

The present study examined the relationship between family accommodation, caregiver burden and psychological distress in family members of OCD patients. It also examined that the manner in which the family members of OCD patients facilitate, reassure and modify their routine and activities due to patient's obsessions and compulsions which may cause burden and psychological distress in family members. Another objective of this study was to examine the meditational role of caregiver burden between family accommodation and psychological distress in family members of OCD patients.

Jungbauer also found that, most of the individuals with psychological problems had intimate connection to family members and family members are the chief caretakers of patients, who suffer from psychological illnesses. Consequently, the persistent sustenance to these clients and constant care for ages, family members in end remain at greater danger of evolving psychological distress, apprehension and depressive symptoms [7].

The findings of the present study showed that there is a significant positive correlation of family accommodation with all types of caregiver burden and psychological distress, which depicts that high level of family accommodation is related with high level of family burden in family members of OCD patients.

As the family members perform more accommodating behaviors to overcome anxiety or distress of patient's OCD symptoms, the more they feel burden. Moreover, large amount of financial burden due to OCD of patient predicted poorer physical well -being and the capacity to cope with everyday life. This depicts that to fulfill the requirements of OCD patients, the family member has to do significant amount

of work, which in other words causes greater financial burden in the relatives of the patient.

A study revealed that severity of patient's OCD symptoms is related to more family burden as well as psychological distress and symptom seriousness and disruptive functioning in children OCD accompanying greater intensity of psychological distress in parents [8,9]. Family members of obsessive and compulsive clients experienced greater burden as compared to family members of depressive patients [10]. Another research related to these findings was conducted by Guraj et al. which revealed that the caretakers of obsessive and compulsive clients report bigger amount of burden due to their accommodating behavior [11].

As a result, they reduced their societal actions that took them to experience greater burden and poor psychological as well as physical well-being. In a similar vein, found that family accommodation and family burden are associated with each other that is, as the level of accommodation by family member increases, family burden also increases.

It was found in the current research significant positive association of family burden with psychological distress, which means that as the family burden increases, psychological distress also increases. Latest research observing family burden and psychological distress recommended that more family burden directed towards greater level of psychological distress in the families. In addition, the severity and duration of illness were positively correlated with an increased burden and psychological distress in the relatives of OCD patients. Moreover, another research had also revealed that in comparison to a control set, primary family members of obsessive and compulsive patients had considerably higher burden and distress [12].

It was found in current research that family accommodation and family burden positively predicts psychological distress in family members of obsessive and compulsive patients. In the study on adult OCD patients, the predictor of family burden and psychological distress was found to be family accommodation [13]. Another research concluded that as the accommodating behavior by family member of OCD patient increases, level of distress also increases. In consistent with these findings, a qualitative study was conducted by Sadia and Sitwat, to investigate the part of relative functioning regarding development of obsessions and compulsions and explore the differences in family functioning between clinical and non-clinical participants [14].

The results of this study depicted that family functioning of the family members of OCD patients was poor as compared to family members of people without OCD. These results give support to the findings of current study in which functional impairment in the lives of family members of OCD patients was significantly depicted in relation to their accommodating behaviors with patient's compulsions and the burden they experienced due to accommodation.

In nutshell, the findings of present research also depicted a substantial positive association of family accommodation with psychological distress. These results are in line with research, which revealed that family members of OCD patients usually involved in the patient's symptoms in many ways, because they are fearful of the patient displaying aggressive and abusive behavior if they do not accommodate. In the end it causes considerable source of distress for the family members [15].

The findings obtained from the current study depicted that family members of OCD patients experienced greater psychological distress and

burden in relation to financial burden, social or leisure activities as well as impact on somatic and psychological health of others, because of accommodating patient's rituals, providing them reassurance, facilitating their compulsions, bearing odd behaviors or domestic disturbance and by amending personal routines due to patients' symptoms [16-19].

Therefore, it is necessary to incorporate the primary family members in the therapy along with the patient for the treatment of OCD [20,21].

Conclusion and Limitations

The findings of the current study revealed that taking care of a patient with psychological disorder, especially OCD which involves compulsions that usually takes place at home, causes significant burden and distress for the family member. Family member's involvement in unnecessary family accommodating behaviors, either voluntarily or under stress through imposing needs from OCD patient significantly causes greater burden and psychological distress in family members. It is found that the way in which the family members of OCD patients accommodate or facilitate the patient's symptoms, lead them towards significant impairment in their social, personal and occupational life. It also places burden on them usually financial and social burden.

The present study also faced some limitations. As the data was majorly collected from Government hospitals therefore; no representation could be done in the context of socio-economic status and the results cannot be generalized to all population. Equal number of family members (parents, spouses, siblings or children) was not taken. Therefore, no representation of the accommodating behavior of any particular family member could be analyzed. Family members of obsessive-compulsive disorder patient's increases the severity of patient's OCD symptoms by providing them reassurance, facilitating or helping them due to lack of knowledge about the disorder. Obsessive compulsive disorder has an opposing impact on the individual well-being of family members of OCD patients. Hence, the results of present research suggest that experts functioning with family members of OCD patients should emphasize not merely to take care of patient with OCD, however also on their family member's condition and individual well-being.

Future Implications

The family members of OCD patients need to be taught about the coping strategies in order to deal with the burden as well as psychological distress. The family counseling can be provided to improve the treatment process of the patient by providing counseling regarding their accommodation behavior. Family support system can be provided to manage family burden and to reduce psychological distress. Emphasize the importance of including family members in the treatment process, especially in behavioral therapy sessions. There is an excessive necessity for care, learning and obedience platforms in order to reduce the burden and septicity to family members of OCD patients.

These platforms may involve management interventions intended for patients and their family members, which may reduce the relative burden and impact the medical improvement of the patient definitely. In Pakistan, family is the main supporting source for the mentally ill individuals. Because of the disabling effects of illness, family members feel burdened but they bear it quietly and never articulate it. Such families need professional help, advice and information to alleviate their burden, need encouragement to change their role as well as to

support patient to improve his life quality as well as wellbeing. While considering higher number of mothers as family members, they require greater assistance of psychological fitness specialist.

References

1. Lebowitz ER, Panza KE, Su J, Bloch MH. Family accommodation in a obsessive–compulsive disorder. Expert Review of Neurotherapeutics, 2012; 12(2): 229–238.
2. Cooper M. Obsessive–compulsive disorder: Effects on family members. The American Journal of Orthopsychiatry 1996; 66(2): 296–304.
3. Renshaw KD, Steketee G, Chambless DL. Involving family members in the treatment of OCD. Cognitive Behaviour Therapy. 2005; 34(3), 164–175.
4. Merlo LJ, Lehmkuhl HD, Geffken GR, Storch EA. Decreased family accommodation associated with improved therapy outcome in pediatric obsessive compulsive disorder. Journal of Consulting and Clinical Psychology 2009; 77: 355–360.
5. Pinto A, Van Noppen B, Calvocoressi L. Development and preliminary psychometric evaluation of a self-rated version of the Family Accommodation Scale for obsessive-compulsive disorder. Journal of Obsessive-Compulsive and Related Disorders. 2012; 2(4): 457-465.
6. Hayes AF. Process: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. 2012.
7. Jungbauer J. Angermeyer MC. Living with a schizophrenic patient: A comparative study of burden as it affects parents and spouses. Psychiatry. 2004; 65:110-123.
8. Ramos-Cerqueira AT, Torres AR, Torresan RC, Negreiros AP, Vitorino CN. Emotional burden in family members of patients with obsessive compulsive disorder. Depression and Anxiety. 2008; 25(12): 1020-e1027.
9. Storch EA, Geffken GR, Merlo LJ, Jacob ML, Murphy TK., et al., Family accommodation in pediatric obsessive–compulsive disorder. Journal of Clinical Child and Adolescent Psychology. 2009; 36(2): 207–216.
10. Vikas A, Avasthi A, Sharan P. Psychosocial impact of obsessive-compulsive disorder on patients and their caregivers: A comparative study with depressive disorder. International Journal of Social Psychiatry. 2011; 57(1): 45-56.
11. Guruaj GP, Math SB, Reddy JYC, Chandrashekar CR. Family burden, quality of life and disability in obsessive compulsive disorder (OCD): An Indian perspective. Original article. 2008; 54 (1): 91-97.
12. Grover S, Dutt A. Perceived burden and quality of life of family members in obsessive–compulsive disorder. Psychiatry Clinical Neuroscience 2011; 65(5): 416–422.
13. Stewart SE, Beresin C, Haddad S, Stack D, Fama J, et al., Predictors of family accommodation in obsessive-compulsive disorder. Annals of Clinical Psychiatry. 2008; 20(2): 65e70.
14. Sadia. Role of family functioning in the development of obsessive-compulsive disorder. Institute of Applied Psychology, University of the Punjab, Lahore, Pakistan. 2007.
15. Peris TS, Benazon N, Langley A, Roblek T, Piacentini J. Parental attitudes, beliefs and responses to childhood OCD: The parental attitudes and behavior scale. Child & Behavior Therapy. 2008; 30(3). 199–214.

16. Ghafoor H. Relationship of religiosity, guilt and self-esteem in individuals having obsessive compulsive disorder. Department of Clinical Psychology, Government College University, Lahore, Pakistan. 2010.
17. Kessler RC, Andrews G, Colpe, et al., Short screening scales to monitor population prevalence's and trends in non-specific psychological distress. Psychological Medicine. 2002; 32: 956-959.
18. Kausar R, Powell GE. Carers' Coping with Post-onset Personality and Physical Changes in Patients with Neurological Disorders. Pakistan Journal of Psychological Research. 1994; 9 (4): 1-11.
19. Nasr T. Psychoeducation of families of Schizophrenia Patient. (Unpublished doctoral dissertation). Institute of Applied Psychology, University of the Punjab. 2010.
20. Pai S, Kapur RL. The burden of the family of a psychiatric patient: Development of an interview schedule. British Journal of Psychiatry. 1981; 138: 331-335.
21. Sitwat A, Ghafoor S. Threat perception, psychological distress and coping strategies in adolescents of Lahore schools after Peshawar attacks. 2015.

Corresponding Author: ***Maria Zaheer, Department of Psychology, Virtual University of Pakistan***

Email: mariazaheer630@gmail.com

Received date: 23 November, 2021 Accepted date: 30 November, 2021