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ORIGINAL ARTICLE

Sociodemographic Determinants of Personality Disorder In Patients of Obsessive-compulsive Disorder

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ABSTRACT

Background & objective: Obsessive Compulsive Disorder (OCD) is the 4th most prevalent psychiatric disorder in Epidemiological Catchment Area (ECA) Survey and most individuals with OCD have co-morbid personality disorders (PD). The present study was undertaken to find the prevalence of PD among patients with OCD and the sociodemographic determinants that influence the development PD in patients with OCD.

Methods: The cross-sectional analytical study was conducted in OCD clinic of Bangabandhu Sheikh Mujib Medical University from January 2015 to September 2016. Respondents were recruited from the OCD patients diagnosed on the basis of DSM-IV criteria and face to face interview was conducted with the help of the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II questionnaire). The main outcome variable was PD in patients of OCD and the exposure variables (determinants) were selected sociodemographic characteristics.

Result: The mean age of the OCD patients was (28 ± 8.7) years. Almost half (49%) of OCD patients belonged to the age group 20-30 years. Female respondents were 53.6%. Among the respondents, 62% had co-morbid PD. The mean age of the OCD patients with PD was observed to be significantly higher (29.1 ± 9.1 years) than those without PD (26.2 ± 7.8 years) (p = 0.047). Male OCD patients were 2.4 (95% CI of OR: 1.2 – 4.7) times more likely to have PD than their female counterparts (p = 0.012). Ethnic groups other than Muslims tend to be associated with PD more often and carry more than 8-fold (95% CI of OR: 8.4 – 37.2) higher risk of having the condition (p = 0.001). Likewise, other occupants were nearly 2(95% CI of OR: 0.98 – 3.74) times more prone to have PD than the students (p = 0.056).

Conclusion: Personality Disorders are highly prevalent among people with OCD which remains underdiagnosed & under-addressed. Male OCD patients, non-Muslims and occupants other than students are more prone to have PD. Persons with Personality Disorders are far more likely to refuse psychiatric help and deny their problems.

Key words: Personality Disorder, Obsessive Compulsive Disorder, Bangladesh.

INTRODUCTION:

The study of obsessive-compulsive disorder (OCD) has raised an increasing interest in different fields over the last few years. The study of personality disorder in individuals with OCD has intrigued researchers & clinicians for many years, but remains controversial. The association between OCD and personality disorders (PD) is one of the best-known relationships between mental state and personality. OCD is the 4th most prevalent psychiatric disorder in Epidemiological Catchment Area (ECA) Survey[1] and the 10th most disabling of all medical disorders in an

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early burden of disease study. The lifetime prevalence rates of OCD (range 1.9-2.5%) and annual prevalence rates of OCD (range 1.1-1.8%) are remarkably consistent across countries except Taiwan.[2] Prevalence of OCD in Bangladesh is 0.5%.[3]

The clinical condition of OCD is characterized by the presence of obsessions or compulsions. An obsession is a recurring and persistent thought, idea, or image, which is experienced in a parasitic way and its content is usually undesirable and produces anxiety; it is involuntary and disturbs the course of the subject's normal thought activity. Sometimes, it is accompanied by the need to perform a certain action (either behavior or other thoughts), which is performed as a compulsion or obsessive ritual with the aim of reducing the feeling of distress. Reported age at onset is usually during the adolescence. The onset for males occurred significantly earlier than for females and 83% of patients experienced the onset of significant symptoms between ages 10 and 24 years.[4] OCD is found more common in female (67.8%) than male (32.2%) in Bangladesh.[3]

Persons with OCD are commonly affected by other mental disorders. The lifetime prevalence for major depressive disorder in persons with OCD is about 67% & for social phobia about 25%. Other common co-morbid psychiatric diagnosis in OCD patients includes alcohol use disorder, generalized anxiety disorder, specific phobia, panic disorder, eating disorders and personality disorders. OCD exhibits a superficial resemblance to obsessive compulsive personality disorder. Personality Disorder (PD) is an enduring pattern of behavior and inner experiences that deviates significantly from the individual's cultural standards; is rigidly pervasive; has an onset in adolescence or early adulthood; is stable through time; leads to unhappiness and impairment; and manifests in at least two of the following four areas: cognition, affectivity, interpersonal function, or impulse control. PD symptoms are ego syntonic and alloplastic (adapt by trying to alter the external environment rather than themselves).[5]

Personality Disorders are classified according to DSM-IV into three clusters. The clusters are based on descriptive similarities. Cluster A includes three PDs with odd, aloof features (Paranoid, Schizoid and Schizotypal). Cluster B includes four PDs with dramatic, impulsive and erratic features (Borderline, Anti-social, Narcissistic and Histrionic). Cluster C includes three PDs sharing anxious & fearful features (Avoidant, Dependent and Obsessive Compulsive). Other than these ten types of PDs, there are two other types; Depressive and Passive-Aggressive. Individuals frequently exhibit traits that are not limited to a single PD. When a patient meets the criteria for more than one PD, clinician/researcher should include each.[5] Among those with OCD, the prevalence of individual categories of PD appears to vary between the sexes. Men with OCD are more likely to meet diagnostic criteria for anti-social,[6] schizotypal[7] or obsessive-compulsive personality disorder (OCPD),[8] while borderline and dependent personality disorders appear to be more frequent among women.[7]

The co-morbidity of OCD and PDs has been studied more systematically since the establishment of a separate axis for PD in DSM-III.[9] Recent studies, employing structured assessments, have shown that most individuals with OCD meet criteria for at least one co-morbid PD, usually from the anxious cluster, although only a minority has OCPD.[10-12] Thus, other personality patterns, usually mixed types, seem to occur more frequently in OCD.[13] However, which of the specific cluster among others obtains the highest prevalence depends on which version of the DSM is used for the assessment of PDs. The prevalence of OCPD in a sample of OCD patients increased when DSM-III-R criteria were applied instead of DSM-III criteria.[14] Assessments of PD in OCD patients are scarce according to DSM-IV criteria. In one study using DSM-IV, a predominance of Cluster C PDs was found, with the majority of patients fulfilling criteria for OCPD.[15] In Bangladesh, by far, no study has yet been done to measure the PD among OCD population. So, the present study aims to investigate the prevalence of PD among OCD patients and the socio-demographic variables that determine the development of PD in OCD patients.

METHODS:

This cross-sectional analytical study was carried out on Bengali speaking patients with Obsessive Compulsive Disorder attending in Obsessive Compulsive Disorder

(OCD) Out-Patient Clinic of the Psychiatric Department (OPD) at Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh over a period of 19 months from January 2015 to September 2016. A total of 151 patients of both sexes, aged ≥ 18 years or above diagnosed as having OCD based on DSM-IM-IV criteria were consecutively included in the study. However, patients who is psychotic, mute, non-communicable and having serious medical illness and cognitive impairment were excluded from the study. A three-phase approach has been used for data collection. The researcher carried out initial structured interviews. The full assessment of OCD was done in the first phase of the survey by an expert consultant of psychiatry in OCD clinic of BSMMU. After meeting all the eligibility criteria, sociodemographic information was taken by the researcher in second phase and in last phase, the SCID-II questionnaire was applied to screen for Personality Disorders among the OCD patients by face to face interview complying with all ethical issues.

Data analysis was performed by statistical package for social science (SPSS), version-17. The test statistics used to analyze the data were Chi-square or Fisher's Exact Test and Unpaired t-Test. Data presented on categorical scale were compared between groups (with and without OCD) using Chi-square (χ^2) or Fisher's Exact Test, as appropriate, while the data presented on continuous scale were compared between groups using Unpaired t-Test. The level of significance was set at 5% and $p < 0.05$ was considered significant.

RESULTS:

Demographic characteristics:

Almost half (49%) of the OCD patients belonged to the age group 20-30 years with mean age of the patients being 28 years (range: 13-60 years). Females were a bit higher (53.6%) than the males (46.4%). Majority (84.1%) of the patients was Muslim. In terms of occupation, students formed 41.1%, followed by housewives (31.1%), service holder (12.6%), unemployed (9.9%), businessman (2.6%), others (2.7%). Over half (51%) of the patients were unmarried, 45% married. Graduate level educated or higher comprised of 47% of the sample, secondary and higher secondary level educated were 29.8% and 15.2% respectively. More than two-thirds (69.5%) of the respondents belonged to nuclear family and over 70% of the patients lived in the urban community (Table I).

Prevalence and types of personality disorder:

Using SCID-II, out of total 151 patients, 94(62%) were screened as having personality disorders (PDs). The most dominant types of personality disorder found were OCPD (41.5%) and avoidance (39.4%). Over one-third (38.3%) of the patients were paranoid, 22.3% were schizo-typal, 18% borderline and 16% schizoid disorders. A quarter (25.5%) of patients was found depressive, 10.6% dependent & 7.4% anti-social. A few patients were narcissistic (5.3%), passive-aggressive (1.1%) or histrionic (2.1%) (Table II). In terms of severity of OCD, mostly were of moderate severity (44.4%) or severe (35.8%). Patients with extreme OCD were 13.2% and mild OCD 6.6% (Table III).

Association between demographic characteristics & PD

The mean age of the OCD patients with PD was observed to be significantly higher than those without PD (p=0.047). Male OCD patients were 2.4 (95% CI of OR: 1.2-4.7) times more likely to have PD than their female counterparts (p=0.012). Ethnic groups other than Muslims tend to be associated with PD more often and carry more than 8-fold (95% CI of OR: 8.4–37.2) higher risk of having the condition (p=0.001). Likewise, other occupants were nearly 2 (95% CI of OR: 0.98-3.74) times more prone to have PD than the students (p=0.056). None of the other demographic characteristics was found to be associated with PD (Table IV). Nearly 60% of the PDs were found in severe and extreme OCD patients as compared to 41.5% in mild and moderate form of OCD patients. The risk of having PDs in severe and extreme OCDs is 2.8(95% CI of OR: 1.4-5.6) times higher than that in mild and moderate OCDs (Table V). Nearly 60% of the PDs were found in sever and extreme OCD patients as compared to 41.5% in mild and moderate form of OCD patients. The risk of having PDs in severe and extreme OCDs is 2.8 (95% CI of OR: 1.4-5.6) times higher than that in mild and moderate OCDs (Table VI).

Association between sex and type of PDs:

Association between sex and types of PDs shows that out of the 12 types of PDs, paranoid and OCPD demonstrated their significant presence in males (p = 0.020 & p=0.042 respectively), while borderline PD tend to be more often associated with females (p= 0.023). Anti-social PD was considerably higher in males than their female counterparts (p=0.087) (Table VII).

TABLE I. Distribution of patients by demographic characteristics (n = 151)

Demographic characteristics	Frequency	Percentage
Age* (yrs)		
< 20	32	21.2
20 – 30	74	49.0
30 – 40	27	17.9
40 – 50	15	19.9
≥ 50	03	2.0
Sex		
Male	70	46.4
Female	81	53.6
Religion		
Muslim	127	84.1
Hindu	20	13.2
Christian	02	1.3
Buddhist	02	1.3
Occupation		
Unemployed	15	9.9
Student	62	41.1
Housewife	47	31.1
Businessman	04	2.6
Service	19	12.6
Others	03	2.7
Marital status		
Unmarried	77	51.0
Married	68	45.0
Separated	01	.7
Divorced	05	3.3
Education		
Illiterate	02	1.3
Primary level	09	6.0
Secondary level	45	29.8
Higher Secondary level	23	15.2
Graduate and above	72	47.7
Habitat		
Urban	109	72.2
Rural	42	27.8
Family status		
Nuclear family	105	69.5
Joint family	46	30.5

***Mean ± SD** = (28 ± 8.7) years; **range** = 13 – 60 years.

TABLE II. Distribution of patients by types of personality disorder (n = 94*)

Types of personality disorder	Frequency	Percentage
Paranoid	36	38.3
OCPD	39	41.5
Avoidant	37	39.4
Schizoid	15	16.0
Schizo-typal	21	22.3
Borderline	17	18.1
Dependent	10	10.6
Anti-social	07	7.4
Narcissistic	05	5.3
Passive-aggressive	01	1.1
Depressive	24	25.5
Histrionic	02	2.1

*Total will not correspond to 100% for multiple response

TABLE III. Distribution of patients by severity of OCD (n = 151)

Severity of OCD	Frequency	Percentage
Mild	10	6.6
Moderate	67	44.4
Severe	54	35.8
Extreme	20	13.2

*Total will not correspond to 100% for multiple response

TABLE IV. Association between demographic characteristics and personality disorders

Demographic characteristics	PD		OR (95% of CI of OR)	p-value
	Present (n = 94)	Absent (n = 57)		
Age (yrs)	29.1 ± 9.1	26.2 ± 7.8	Not computable	0.047
Sex				
Male	51(54.3)	19(33.3)	2.4	0.012
Female	43(45.7)	38(66.7)	(1.2-4.7)	
Religion				
Other religion	22(23.4)	2(3.5)	8.4	0.001
Muslim	72(76.6)	55(96.5)	(1.9-37.2)	
Occupation				
Other occupants	61(64.9)	28(49.1)	1.9	0.056
Student	33(35.1)	29(50.9)	(0.98 – 3.74)	
Marital status				
Unmarried & separated	54(57.4)	29(50.9)	1.3	0.432
Married	40(42.6)	28(49.1)	(0.67-2.52)	
Education				
Graduate or above	41(43.6)	31(54.4)	0.65	0.199
Below graduation	53(56.4)	26(45.6)	(0.33-1.25)	
Habitat				
Urban	67(71.3)	42(73.7)	0.88	0.749
Rural	27(28.7)	15(26.3)	(0.42-1.86)	
Family status				
Nuclear	63(67.0)	42(73.7)	0.72	0.388
Joint	31(33.0)	15(26.3)	(0.35-1.50)	

Figures in the parentheses indicate corresponding %;
***Chi-squared Test (χ^2)** was done to analyze the data.

TABLE V. Association between severity of OCD and PD

Severity of OCD	PD		OR (95% of CI of OR)	p-value
	Present (n = 94)	Absent (n = 57)		
Severe & extreme	55(58.5)	19(33.3)	2.8	
Mild & moderate	39(41.5)	38(66.7)	(1.4-5.6)	0.003

Figures in the parentheses indicate corresponding %;
*Chi-squared Test (χ^2) was done to analyze the data.

TABLE VI. Association between sex and types of PDs

Type of PD	Sex		p-value
	Male (n = 51)	Female (n = 43)	
Paranoid	25(49.0)	11(25.6)	0.020
OCPD	26(51.0)	13(30.2)	0.042
Avoidant	18(35.3)	19(44.2)	0.379
Schizoid	8(15.7)	7(16.3)	0.938
Schizo-typal	10(19.6)	11(25.6)	0.488
Borderline	5(9.8)	12(27.9)	0.023
Dependent	4(7.8)	6(14.0)	0.534
Anti-social	6(11.8)	1(2.3)	0.087
Narcissistic	4(7.8)	1(2.3)	0.239
Passive-aggressive	0(0.0)	1(2.3)	0.457
Depressive	16(31.4)	8(18.6)	0.157
Histrionic	1(2.0)	1(2.3)	0.708

Figures in the parentheses indicate corresponding %;
*Chi-squared Test (χ^2) was done to analyze the data.

DISCUSSION:

The study showed that over 60% of the patients with OCD have Personality Disorders (PDs) indicating a high prevalence of PDs in Bangladeshi OCD patients. Using SCID-II questionnaire an even higher prevalence of PDs (75%) was observed in OCD.[16] This potentially highlights the poor specificity of SCID-II questionnaires. The SCID-II questionnaire was deliberately constructed to be over-inclusive, with a high sensitivity but low specificity, in order to find individuals who might be expected to have a PD.[17] Therefore, the method of assessment used in this study has led to an over-estimation of personality problems.

The study findings showed that almost half (49%) of OCD patients belonged to the age group 20-30 years with mean age being 28 years (range: 13-60 years) indicating that OCD is disease of young age. The mean age of the OCD patients with PD (29.1 ± 9.1 years) was observed to be significantly higher than those without PD (26.2±7.8 years) (p=0.047). Early intervention and treatment of OCD may reduce the risk of having PD. Compared to females, male OCD patients were 2.4 times more at risk of having PD (p=0.012). Men with OCD were more likely to have Paranoid, Obsessive-Compulsive, Avoidant and Depressive PDs. In other studies, men with OCD were reported more likely to have personality psychopathology in general than women and antisocial PD,[6] obsessive-compulsive PD[8] and cluster A subtypes in particular.[7] Most of the types of PDs are more common among men in general population around the world. Researcher found more presence of different types of PDs among men in OCD population. The present study also showed that ethnic groups other than Muslims carry more than 8-fold higher risk of having PDs (p=0.001). Bangladesh is a country of multiple cultures where different ethnic groups believe to coexist. Presence of different religion rituals may aggravate the severity of obsessive-compulsive symptoms, which in turn increase the risk of having PD among patients with OCD. Researcher found that occupants other than students were nearly 2 times more prone to have PD (p=0.056). None of the other demographic characteristics was found to be associated with PDs. Personality Disorders are common and chronic. They occur in 10-20% of the general population. Approximately 50% of psychiatric patients have a PD which is frequently co-morbid with other clinical syndromes. PD is also a predisposing factor for other psychiatric disorders (e.g., substance use disorder, suicide, affective disorders, impulse control disorder, eating disorder and anxiety disorder) in which it interferes with treatment outcomes of many clinical syndromes & increase personal incapacitation and morbidity. OCD is associated with reduced quality of life as well as high levels of social and occupational impairment. Majority of patients report a gradual worsening of obsession and compulsion prior to the onset of full criteria of OCD, which is followed by chronic course. The nature of the personality pathology is diverse. Persons with PDs generally refuse psychiatric help, deny their problems than persons with anxiety disorders, depressive disorders, and are reluctant to receive treatment. Person with PDs do not feel anxiety

about their maladaptive behavior. So, OCD patients with co-morbid PDs may have a very poor outcome. They remain undiagnosed and untreated.[5]

There are several limitations of the study which deserve mention. Firstly, the SCID-II questionnaire deliberately constructed to be over-inclusive has led to an over-ascertainment of personality problems and requires a second stage interview in order to improve the likelihood of detecting cases of PD. Secondly, the sample was not sufficiently enough to represent the study population. Further, it was a hospital-based study and, as such the findings of the study cannot be generalized to reference population. Thirdly, patients with Obsessive Compulsive Disorder was diagnosed clinically by single expert consultant due to time limitation, which was not verified by other independent observer.

Conclusion:

From the findings of the study, it appears that OCD generally affects young people with no sex differential. A substantial proportion of the OCD patients may have PDs. Male OCD patients, non-Muslims and occupants other than students are more prone to have PD. Persons with Personality Disorders are far more likely to refuse psychiatric help and deny their problems. Early intervention is crucial. Parents, family members and friends should be educated properly about the disease and its burden so that they can help the OCD patients to overcome their mental health associated PD.

CONFLICT OF INTEREST

There was no involvement of pharmaceutical or third party in this research. The fund was provided by research grant committee of BSMMU.

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