

## Characteristics of patients with obsessive compulsive disorder attending a tertiary care psychiatry hospital

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### Summary

Obsessive compulsive disorder (OCD) is one of the most disabling psychiatric disorders. The purpose of the study was to find out the characteristics of patients with OCD attending a tertiary care psychiatry hospital in Bangladesh. This cross-sectional study was conducted in National Institute of Mental Health (NIMH), Dhaka from January 2021 to December 2021. Overall, 150 patients with OCD visited the outpatient and inpatient departments of the institution were selected conveniently. A pretested printed semi-structured questionnaire containing socio-demographic variables and variables related to OCD was applied for data collection. Data was collected by face to face interview with pen and paper method and data analysis was performed by statistical package for social sciences (SPSS) version 25. The results showed that the mean age of the respondents was 27.98 ( $\pm 8.632$ ) years. The male and female ratio was 1.3:1. More than half (51.3%) of the respondents were from urban background. Majority (33.3%) completed their graduation. Childhood (less than 18 year) onset of OCD was found among 42% of respondents, 86.7% respondents received treatment of OCD and among them 43.85% had treatment adherence. Almost three fourth (72%) of the them remained untreated for less than five years where others remained untreated for more than 5 years. Most of the respondents (88.7%) had no history of hospital admission and a considerable portion (39.3%) had family history of OCD. This study identified different factors related to OCD along with sociodemographic characteristics of the participants which might be used as baseline findings for future epidemiological studies.

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### Introduction

Obsessive-compulsive disorder (OCD) is a chronic psychiatric disorder that is characterized by obsessions and compulsions. Obsessions are uncontrollable distressful thoughts. Compulsions are recurrent behaviors or thoughts performed in an attempt to decrease the anxiety of the obsessions.<sup>1</sup> Epidemiological data suggested that worldwide prevalence of obsessive-compulsive disorder (OCD) is approximately 2% of the general population.<sup>2</sup> In a meta-analysis of 34 studies the overall aggregate current, period and lifetime OCD prevalence estimates were 1.1%, 0.8%, and 1.3%, respectively. In a typical sample, women were 1.6 times more likely to experience OCD compared to men, with lifetime prevalence rates of 1.5% in women and 1.0% in men.<sup>3</sup> In a German study, the life-time prevalence rates for OCD and subclinical OCD were 0.5% and 2%, respectively. In various

measures of psychosocial function and quality of life, OCD and subclinical OCD were significantly impaired. However, subclinical OCD subjects did not visit mental health professionals more often than controls. Due to different epidemiological characteristics subclinical OCD might represent a syndrome distinct from OCD.<sup>4</sup>

A multi centers study conducted in Pakistan over 200 patients revealed that around 56% patients had inherited psychiatric disorders from their families.<sup>5</sup> It was revealed in a retrospective study that the estimated frequency of OCD was 4.1%.<sup>6</sup> Findings from this large study validated gender as an important mediator of phenotypic heterogeneity in OCD. The mechanistic basis for these differences might involve complex interactions between biological, cultural and environmental factors.<sup>7</sup> In an Indian study, the point prevalence of OCD was 3.3% where 8.5% students

fulfilled criteria of sub threshold OCD. Compared to those without obsessive compulsive symptoms (OCSs), those with OCD and subthreshold OCD were more likely to have lifetime tobacco and alcohol use, psychological distress, suicidality, sexual abuse and higher attention-deficit/hyperactivity disorder symptom scores. Subjects with subthreshold OCD were comparable to those with OCD except that OCD subjects had higher psychological distress scores and academic failures.<sup>8</sup> Evidence indicated that substance use disorders, especially substance dependence and OCD, might have a common biological vulnerability. This could result in overlapping symptoms and a relatively high level of co-morbidity.<sup>9</sup>

A cross-sectional study was done in OCD clinic of outpatient department (OPD) of BSMMU, showed that, majority (70%) of the patients had moderate to severe sufferings. Male had co-morbid anxiety disorders (like panic disorder, agoraphobia and social phobia) more but female patients had more depressive disorders.<sup>10</sup> The study aimed to find out the sociodemographic characteristics and other factors related to obsessive compulsive disorder among patients attending a tertiary care psychiatry hospital in Bangladesh.

**Materials and methods**

This was a cross-sectional study conducted from January to December 2021. The study was accomplished among patients with obsessive compulsive disorder attending in outpatient and inpatient departments of National Institute of Mental Health, Dhaka, Bangladesh. Convenient sampling technique was applied to recruit 150 samples. Individuals of both male and female gender who were 18 years or more were included in the study. Participants who had neuro-cognitive disorder, intellectual disability or severe mental disorder were excluded from the study. A semi-structured questionnaire containing socio-demographic variables and variables related to OCD was developed on the basis of a list of variables identified through literature review and finalized by pretesting in Shaheed Suhrawardy Medical College Hospital, Dhaka. Data was collected by applying the semi-structured questionnaire by face-to-face interview with pen and paper method. Collected data were thoroughly checked and rechecked and then coded put them in the computer. Data analysis was done by statistical packages for social sciences (SPSS) version 25. All ethical concerns were strictly followed during every step of the study.

**Results**

In this study, about three fourth (74%) of the respondents were within the age group of 20 to 39 years where the mean age of the respondents was 27.98 (SD±8.632) years. More than half of the respondents (56.0%) were male and the male female ratio was 1.3:1. Maximum (94.0%) respondents were

Muslim and more than half (51.3%) were from urban area. Regarding occupation, more than one third (38.0%) respondents were students followed by homemaker (23.3%), service holder (17.3%) and unemployed (14%). More than half of respondents (52.7%) were unmarried, whereas married were 44.0% (Table 1).

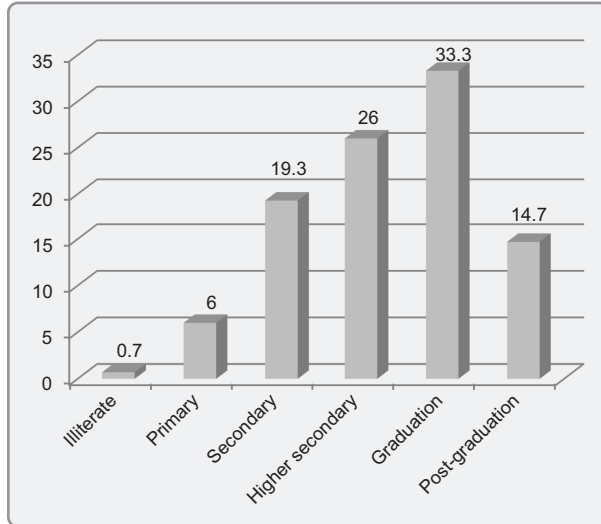
**Table 1: Sociodemographic characteristics of participants (n=150)**

Characteristic	Frequency	Percentage
<b>Age group (in years)</b>		
<20	20	13.3
20 to 39	111	74.0
40 to 59	18	12.0
≥60	1	0.7
Mean ± SD	27.98±8.632	
<b>Gender</b>		
Male	84	56.0
Female	66	44.0
<b>Religion</b>		
Islam	141	94.0
Hinduism	8	5.3
Christianity	1	0.7
<b>Marital status</b>		
Unmarried	79	52.7
Married	66	44.0
Divorced	5	3.3
<b>Residence</b>		
Urban	77	51.3
Semi urban	25	16.7
Rural	48	32.0
<b>Occupation</b>		
Unemployed	21	14.0
Service holder	26	17.3
Homemaker	35	23.3
Student	57	38.0
Others	11	7.4

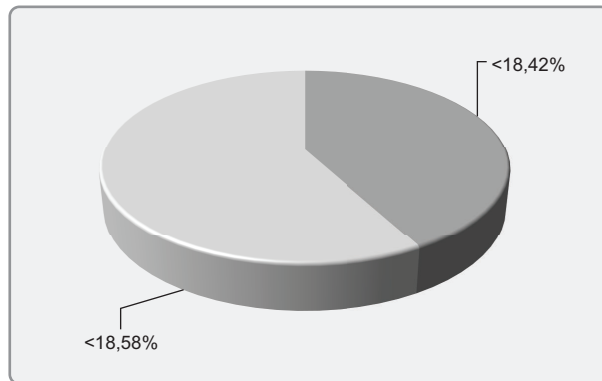
In terms of education, among the respondents one third (33.3%) completed their graduation, after that more than one fourth (26.0%) completed higher secondary level and about one fifth (19.3%) respondents completed secondary level of education. Only 0.7% was illiterate (Figure 1).

Among the respondents, 42% respondents had childhood onset of OCD (less than 18 year), whereas 58% had onset after 18 years (Figure 2).

This study showed that 86.7% respondents received treatment of OCD in their life but more than half (56.2%) of them had no treatment adherence, whereas 64% respondents was



**Figure 1: Distribution of the respondents according to education (n=150)**



**Figure 2: Distribution of the respondents according to age of onset of symptoms of OCD (n=150)**

continuing current treatment for last one month and among them majority (87.5%) was adherent to current treatment (Table 2).

**Table 2: Treatment of OCD and adherence of treatment among the respondents**

Variables	Frequency	Percentage
<b>Lifetime treatment of OCD (n=150)</b>		
Yes	130	86.7
No	20	13.3
<b>Lifetime treatment adherence (n=130)</b>		
Yes	57	43.8
No	73	56.2
<b>Current treatment of OCD (n=150)</b>		
Yes	96	64.0
No	54	36.0
<b>Current treatment adherence (n=96)</b>		
Yes	84	87.5
No	12	12.5

This study revealed that about three fourth (72%) of the respondents remained untreated for less than five years followed by five to nine years (15.3%). The mean duration of untreated OCD was 4.47 ( $\pm$  SD 6.604) years (Table 3).

**Table 3: Distribution of the respondents according to duration of untreated OCD (n=150)**

Duration of untreated OCD (in years)	Frequency	Percentage
< 5	108	72.0
5 to 9	23	15.3
10 to 14	12	8.0
>14	7	4.6
Mean $\pm$ SD	4.47 $\pm$ 6.604	

Majority of (88.7%) respondents had no history of hospital admission, whereas only 11.3% had history of hospital admission for OCD (Table 4).

**Table 4: Distribution of the respondents according to history of hospitalization for OCD (n=150)**

History of hospital admission	Frequency	Percentage
Yes	17	11.3
No	133	88.7
Total	150	100.0

This study found that 39.3% of respondents had family history of OCD and the rest (60.7%) were without the family history of OCD (Table 5).

**Table 5: Distribution of the respondents according to family history of OCD (n=150)**

Family history	Frequency	Percentage
Yes	59	39.3
No	91	60.7
Total	150	100.0

**Discussion**

The current showed that, about three fourth (74%) of the respondents were within the age group of 20 to 39 years followed by 13.3% of the respondents were less than 20 years and 12.0% of the respondents were 40 to 59 years age group. The mean age of the study population was 27.98 ( $\pm$ 8.63) years. These results showed that young adult age group patients were most commonly suffered from OCD. However, middle age group patients were also reported about OCD. It was also mentioned that young adolescent age group patients were most commonly suffering from OCD.<sup>11</sup> In Bangladesh, a study showed almost similar findings where the mean age of the respondents was 26.6 ( $\pm$ 9.9) years.<sup>10</sup> In another study conducted in Pakistan

showed that the mean age of OCD patients was 27.2 ( $\pm 8.7$ ) years.<sup>5</sup> More than half (56%) of the respondents were male in this study. A study revealed nearly similar results where the proportion of male and female was 58.75% and 41.25% respectively.<sup>11</sup> In this study male and female ratio was 1.3:1. The reason for the male predominance might be due to attending facilities for the male, as they went out for different purposes. Another reason for this might be that women in our country lack opportunity for receiving treatment facilities, although among 168.22 million peoples of Bangladesh males comprised 84.19 million and females comprised 84.03 million and ratio was 100.2:100 which reflected almost equal sex ratio of general population.<sup>12</sup> Gender had been considered as one of the possible factors mediating phenotypic expression of OCD.<sup>13</sup> A previous Indian study examined gender differences in OCD also had an over representation by men<sup>8</sup> and this was consistent with the present study. Most previous studies had reported a female predominance or roughly equal gender distribution.<sup>13</sup> These findings were dissimilar to the present study.

In this study, Muslim (94.0%) was the most common religion as Bangladesh is a Muslim predominant country where around 90% peoples were Muslim. Another study in Bangladesh showed 93.3% Muslim among the respondents which corresponded to the study findings.<sup>14</sup> More than half of respondents (52.7%) which might be explained by the reason that maximum respondents belonged to young age group students and another issue might be their illness pattern that could inhibit them to get married, though this issue was not explored in this study. Urban dwellers were more commonly suffering from OCD (51.3%) according to the study. Urban inhabitants might be more aware about the OCD symptoms due to use of device through which they were more connected with internet and social media. The easy accessed to the hospital among the urban dwellers was also another factor. Regarding educational level of the respondents one third (33.3%) completed their graduation, about one fourth of them (26.0%) completed higher secondary level and about one fifth (19.3%) respondents completed secondary level of education. Only 0.7% was illiterate. These results evaluated that OCD was more prevalent among educated person. It was very interesting that illiterate respondents were less commonly suffering from OCD. A study among the university students had done and found multi factorial reasons for the development of OCD.<sup>8</sup> However, these were not explored in this study.

A significant portion (42.0%) of respondents had childhood onset of OCD (less than 18 year) whereas majority (58.0%) had onset after 18 years. Although the age of onset varies, the riskiest periods for OCD development were adolescence and young adulthood.<sup>15</sup> When they began their new life in the university,

those who could not meet the new challenges successfully often sought help and applied to the university health centre for psychiatric distress.<sup>16</sup> They usually experienced feelings of distress and hopelessness. These sentiments could translate into clinical depression, general anxiety, interpersonal relationship issues, behavioural disorders and OCD.<sup>17</sup> This study showed that 86.7% respondents received treatment of OCD in their life and among them 43.85% had treatment adherence, whereas 64% respondents was continuing current treatment for last one month and among them 87.5% respondents was adherent to current treatment. This study revealed that majority of the respondents (72%) remained untreated for less than five years followed by five to nine years (15.3%). The mean of duration of untreated OCD was 4.47 (SD $\pm 6.604$ ) years with the range of 0 to 45 years. In another study the mean duration of untreated illness (DUI) was 106.19 (SD  $\pm 118.14$ ) months, with a mean interval between onset of the disorder and when patients sought professional help was 82.27 $\pm 112.30$  months. Response rates were significantly reduced in subjects with a long duration, using both the cut-off of 24 months and the median value of 60 months. Regression analyses confirmed that a long (>24 months) duration predicted poorer response and higher Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) scores at 12 weeks.<sup>18</sup>

Majority (88.7%) of the respondents had no history of hospital admission, whereas only 11.3% respondents had history of hospital admission for treatment of OCD. This study identified that a noteworthy portion (39.3%) of respondents had family history of OCD and the rest of the (60.7%) cases were without the family history of OCD. In one study conducted in Bangladesh in 2016, was found that 58% of patients with OCD had 1<sup>st</sup> degree relatives of psychiatric disorders obtained by history.<sup>10</sup> Another study conducted in Pakistan showed almost similar result. It was observed that around 56% patients with OCD had inherited psychiatric disorder from their families.<sup>5</sup>

## Conclusion

The study revealed most of the patients with OCD diagnosed after 18 years age. The mean age of the participants of remaining untreated was 4.47 years where a considerable proportion of the individuals remain untreated for more than 5 years for their OCD symptom which was alarming. These findings demanded attention of the policy makers and mental health specialists as well as further larger epidemiological study focusing wide range of associated factors of this disorder.

## References

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders 5<sup>th</sup> ed. Washington, DC: American Psychiatric Press; 2013.
2. Sasson Y, Zohar J, Chopra M, Lustig M, Iancu I, Hendlar T. Epidemiology of obsessive-compulsive disorder: a world view. *J Clin Psychiatry* 1997;58(12):7-10.

3. Fawcett EJ, Power H, Fawcett JM. Women are at greater risk of OCD than men: a meta-analytic review of OCD prevalence worldwide. *J Clin Psychiatry* 2020;81(4):13075.
4. Grabe HJ, Meyer C, Hapke U, Rumpf HJ, Freyberger HJ, Dilling H et al. Prevalence, quality of life and psychosocial function in obsessive-compulsive disorder and subclinical obsessive-compulsive disorder in northern Germany. *Euro Arch Psychiatry Clin Neurosci* 2000;250(5):262-8.
5. Khan I, HAQ MM, Khan A, Rehman M, Samin KA, Khan MM. Demography and symptoms severity of obsessive compulsive disorder in Khyber Pakhtunkhwa, Pakistan. *Hypertension*. 2021;28:15-38.
6. Jabeen S, Kausar R. Obsessive compulsive disorder: frequency and gender estimates. *Pak J Med Sci* 2020;36(5):1048.
7. Tripathi A, Avasthi A, Grover S, Sharma E, Lakdawala BM, Thirunavukarasu M et al. Gender differences in obsessive-compulsive disorder: findings from a multicentric study from India. *Asian J Psychiatr* 2018;37:3-9.
8. Jaisoorya TS, Reddy YJ, Nair BS, Rani A, Menon PG, Revamma M et al. Prevalence and correlates of obsessive-compulsive disorder and subthreshold obsessive-compulsive disorder among college students in Kerala, India. *Indian J Psychiatry* 2017;59(1):56.
9. Blom RM, Koeter M, van den Brink W, de Graaf R, Ten Have M, Denys D. Co-occurrence of obsessive compulsive disorder and substance use disorder in the general population. *J Addict* 2011;106(12):2178-85.
10. Algin S, Sajib MW, Arafat SY. Demography and symptom severity of obsessive compulsive disorder in Bangladesh: a cross sectional observation. *Bang J Psychiatry* 2020;30(2):23-6.
11. Tanidir C, Adaletli H, Gunes H, Kilicoglu AG, Mutlu C, Bahali MK, et al. Impact of gender, age at onset, and lifetime tic disorders on the clinical presentation and comorbidity pattern of obsessive-compulsive disorder in children and adolescents. *J child adolesc psychopharmacol* 2015;25(5):425-31.
12. Bangladesh Bureau of Statistics. Statistical pocketbook 2021. Dhaka (BD): Bangladesh Bureau of Statistics (BBS) Statistics and Informatics Division, Ministry of Planning; 2022.
13. Cilliçilli AS, Telcioğlu M, Aþkn R, Kaya N, Bodur S, Kucur R. Twelve-month prevalence of obsessive-compulsive disorder in Konya, Turkey. *Compr psychiatry* 2004;45(5):367-74.
14. Chowdhury ADMR, Hossain MD, Haq AI, Kowser ASM, Khan SI, Parveen M. Psychiatric comorbidity in patients with obsessive-compulsive disorder. *Arch NIMH* 2020;3(2):16-20.
15. Karamustafalyoglu KO. Obsessive compulsive disorder. *Galle Med J* 2006;9:53-66.
16. Yoldascan E, Ozenli Y, Kutlu O, Topal K, Bozkurt AI. Prevalence of obsessive-compulsive disorder in Turkish university students and assessment of associated factors. *BMC psychiatry* 2009;9:1-8.
17. Macaskill A. The mental health of university students in the United Kingdom. *Br J Guid Couns* 2013;41(4):426-41.
18. Albert U, Barbaro F, Bramante S, Rosso G, De Ronchi D, Maina G. Duration of untreated illness and response to SRI treatment in obsessive-compulsive disorder. *Eur Psychiatry* 2019;58:19-26.