

Obsessive compulsive disorder during COVID-19 pandemic

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Background: People with obsessive compulsive disorder (OCD) are likely to be more susceptible to the mental health impact of COVID-19.

Objectives: We aimed to investigate the socio-demographic and other factors of OCD and relation of its occurrence with COVID-19.

Methods: : This was a cross-sectional study carried out among the persons diagnosed as a case of OCD by a psychiatrist according to Diagnostic and Statistical Manual of Mental Disorders, version 5 (DSM-5) and attended at private chambers of psychiatrists during April 2022 – June, 2022. All the persons diagnosed with OCD, irrespective of gender and aged more than 18 years, were approached for the research. After having their consent, sociodemographic and other information were collected through face-to-face interview of the respondents. Completed data of 153 respondents were analyzed using Statistical Package for Social Sciences (SPSS), version 25. Ethical issues were addressed properly throughout the study.

Results: Mean age of the respondents were 29.3 ± 12 years. More than half (54.9%) of the respondents were unmarried. About one-fifth (18.3%) of the respondents suffered from OCD symptoms for the first time after COVID pandemic occurred in Bangladesh. Among the respondents diagnosed as OCD prior to pandemic, more than one-third (36.8%) had treatment for the disorder. About one-fourth (23.5%) had family history of OCD. One-fifth (20.3%) had history of substance abuse. Suicidal attempt was reported by 19% of respondents. More than half (54.9%) had co-morbid physical illness.

Conclusions: A significant proportion of persons with OCD experienced their symptoms first time during COVID outbreak.

Declaration of interest: None

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Keywords: OCD, COVID-19, sociodemographic factors.

Introduction

The COVID-19 pandemic has proven to be a tremendous stressor for both the general population and individuals with mental illness by now. Pandemics have struck human societies since ancient times and caused huge number of deaths, economic depressions and many more. World

Health Organization (WHO) had declared a pandemic in March 2020 and since then many strategies have been imposed worldwide to limit the spread of SARS-CoV-2, including quarantines, physical distancing, maintaining hand hygiene, wearing protective facemasks etc.¹

In one of the recent review articles, we can find that fear of the virus and various strategies to limit its spread might have a synergistic effect in exerting a negative impact on the mental health worldwide.²

COVID-19 has proven to be an enormous stressor for individuals with OCD. A wide body of literature now shows that that obsessive compulsive symptoms increased during the early stages of the pandemic, both in those with OCD and the general population. COVID-19 became a central theme for many people with OCD.³ According to a review article, individuals who had been diagnosed with obsessive-compulsive disorder (OCD) prior to the current pandemic may be the group most affected by the pandemic among those with mental disorders.² High-risk groups include OCD patients in remission/recovery, geriatrics (i.e., people over age 65), pregnant women, children and adolescents, and healthcare professionals.¹ OCD is associated with reduced quality of life, various comorbid mental disorders and, with severe OCD, an increased risk of suicide attempts.¹

As people with obsessive compulsive disorder (OCD) are likely to be more susceptible to the mental health impact of COVID-19, we aimed to investigate the socio-demographic and other factors of OCD and relation of its occurrence with COVID-19. General Objective of our study was to investigate sociodemographic and other factors of OCD during Covid pandemic and specific was to investigate relation of its occurrence with Covid pandemic.

Methods

It is a descriptive cross-sectional study conducted in a private consultation center of a Psychiatrist of Dhaka city. Study period was from April 2022 to June 2022. All the persons aged 18 years and above, diagnosed with OCD attending the consultation center and consenting for the study were included. A total of 153 patients were included purposively in the study. A Consent form, Diagnostic and Statistical Manual of Mental Disorders 5 (DSM - 5) and a Semi-structured questionnaire prepared by researchers after reviewing related articles from online search were used. Computer software program Statistical Package for Social Sciences (SPSS), version 25.0 for Windows were used for data processing and statistical analysis. All ethical issues were maintained properly.

Results

Mean age of the respondents were 29.32 (±12) years.

Majority (62.8%) had education up to higher secondary standard and above. More than half (54.9%) of the respondents were unmarried. About one-fifth (18.3%) of the respondents suffered from OCD symptoms for the first time after COVID pandemic occurred in Bangladesh. Among the respondents diagnosed as OCD prior to pandemic, more than one-third (36.8%) had treatment for the disorder. About one-fourth (23.5%) had family history of OCD. One-fifth (20.3%) had history of substance abuse. Suicidal attempt was reported by 19% of respondents. More than half (54.9%) had co-morbid physical illness (Table 1).

About 81.7% of the patients were diagnosed with OCD before pandemic. Among them 51 (40.8%) was already on treatment but 74 (59.2%) needed treatment after appearance of COVID pandemic. New cases (n=28, 18.3%) among total cases was significant.

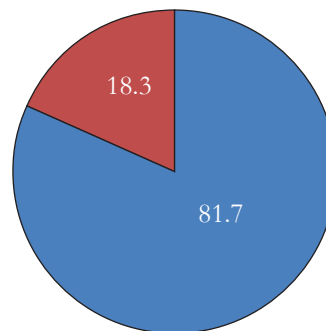


Figure 1: Proportion of new cases after pandemic among total cases (N= 153)

Table 1: Sociodemographic and relevant characteristics of the participants (N=153)

Variable	Frequency (n)	Percentage (%)
Age		
18-27	80	54.5
28-37	31	21.1
38-47	20	13.6
48-57	13	8.8
≥58	3	2.0
Sex		
Male	67	43.8
Female	86	56.2
Marital status		
Unmarried	84	54.9

Variable	Frequency (n)	Percentage (%)
Marital status		
Married	61	39.9
Divorced	6	3.9
Residence		
Urban	113	73.9
Rural	36	23.5
others	4	2.6
Education		
Illiterate	4	2.6
Primary	21	13.7
Secondary	32	20.9
Higher secondary	61	39.9
Graduate	17	11.1
Post-graduate	17	11.1
Others	1	0.7
Family history		
Yes	36	23.5
No	117	76.5
Substance abuse		
Yes	31	20.3
No	122	79.7
Suicide attempt		
Yes	29	19
No	124	81
Physical illness		
Yes	85	55.6
No	68	44.4

Physical comorbidity was absent in 68 participants (44.4%). Frequency of comorbidity found was diabetes mellitus 13 (8.5%), hypertension 9 (5.9%), lung disease 11 (7.2%), renal disease 1 (0.7%), thyroid disease 2 (1.3%), skin disease 27 (17.6%), neurological disease 1 (0.7%), Others 21 (13.7%)

Discussion

The etiology of OCD is largely unknown but probably -complex combination of both genetic, biological, and environmental factors. Stressful life events, comorbid

mental-health disorders, a family history of OCD, and/or personality traits like perfectionism, intolerance of uncertainty, and threat overestimation are general risk factors to cause or trigger OCD.¹

OCD has heterogeneous presenting symptom which might get aggravated in the presence of external stress or cues. There are various factors in this current COVID pandemic which may worsen the symptoms in patients who are already affected by OCD.⁴ Commonly there is elevated levels of psychiatric symptoms following a stress. Decades of research demonstrated that mental health worsens after stressful events. Pandemic is one of such stressful time.⁵ In this study during Covid pandemic our main finding was significant number of new cases of OCD patients and exacerbation of symptoms in old cases. Significant number of patients was found having suicidal ideation that could be due to appearance or aggravation of depressive symptoms. An online study conducted among general public living in the UK (N=406) investigated the development of obsessive compulsive (OC), anxiety and depressive symptom dimensions longitudinally at two time points during and after the first pandemic wave of Covid-19. They found increase in OC symptoms suggesting that this cannot be only adaptive protective behaviors during the pandemic and was present across multiple OC domains.⁵ One of the studies conducted in the child and adolescent psychiatry department of Istanbul University evaluated OC symptom profiles from both during and before the COVID-19 pandemic in young subjects (N=61). More than half of the subjects (n=33; 54.09%) reported an increase in symptom severity. There was a significant increase in the frequency of contamination obsessions (p=0.008) and cleaning/washing compulsions (p=0.039) during the pandemic.⁶ In another online study conducted in Germany among 394 participants with OCD recruited between March to May, 2020 showed that majority of participants (72 %) reported an increase in the severity of their OC symptoms.⁷

In Canada, 6041 individuals completed an online survey. Overall, 60.3% of respondents reported onset of OC symptoms and 53.8% had compulsions to wash hands during the COVID-19 pandemic.⁸ A prospective study was conducted among students of the Xinxiang Medical University of China at three time points during the COVID-19 pandemic. They found that in survey 1 that is at the initial part of pandemic 11.3% of participants had OCD. In surveys 2 and 3 that is later on, 3.6% and 3.5% of participants had OCD respectively.⁹ According to our national study prevalence of OCD in general adult population was 0.7% in 2018-19 that is pre pandemic period.¹⁰

In our study the proportion of OCD was high and interestingly about one fifth had appearance of symptom after Covid pandemic. Mean age of the respondents were 29.32 (± 12) years. More than half of the respondents were unmarried (54.9%) and female (56.2%). Maximum were educated up to HSC (39.9%). To assess frequency of depression and OCD among the general population during COVID-19 pandemic in Saudi Arabia a cross-sectional study using social media platform was conducted (N=2187). They found that Increasing age had increased frequency of having OCD. Males showed more frequency of OCD (67.4%) than females (59.2%). Moreover, married individuals and higher income groups showed a higher incidence of OCD. Higher education levels and employed individuals were more likely to have OCD.¹¹

In a study conducted in a private chamber of Bangladesh just before Covid pandemic (Feb 2018- Jan 2019) showed similar sociodemographic findings. Most of the patients were from 21-30 years of age group (34.4%) with female preponderance (60%). Majority of the patients were married (60%), students (38.4%) and completed up to HSC level (44.8%).¹² On the other hand, some study shows opposite result as well. Between April 1 and May 13, 2020, online questionnaires were distributed among the Netherlands cohorts showed that individuals with the greatest burden on their mental health tended to show a slight symptom decrease.¹³ All OCD patients from the Israeli Center for OCD who had clinical assessments during April to May 2020 and during September 2020 were evaluated in a study. Symptom deterioration was not present in 84% of the patients at the 2-month follow-up and 96% of the patients at the 6-month follow-up. OCD patients who were under active ERP and pharmacological treatment did not experience exacerbated symptoms during COVID-19 at their 2- and 6-month follow-ups.¹⁴

In a study conducted in Bangladesh in 2018, 1.9% of OCD patients was found to have addiction.¹⁵ In another study 7.77% of the respondents with severe mental illness had comorbid substance related and addictive disorders.¹⁶ We found 20.3 % OCD patients having comorbid addiction. In another study 23 among 86 cases (26.7%) selected from 5 different hospitals and clinics of Dhaka city had family history of OCD. The cases having family history had higher prevalence of symptoms than those who did not have family history.¹⁷ In our study family history was present in 23.5 % patients.

OCD has been considered to be associated with a relatively low risk of suicide previously. Recent studies, on the contrary, revealed a significant association between OCD

and suicide attempts and ideation. A huge variation in prevalence rates, however, is reported. In clinical samples, the mean rate of lifetime suicide attempts is 14.2%. Suicidal ideation is referred by 26.3-73.5% of individuals. Predictors of greater suicide risk are severity of OCD, the symptom dimension of unacceptable thoughts, comorbid Axis I disorders, severity of comorbid depressive and anxiety symptoms, past history of suicidality and some emotion-cognitive factors such as alexithymia and hopelessness.¹⁸

Report suggested that every day almost 32 people committed suicide in 2019 but in 2015 and 2017 which was 29 and 30 respectively. The mortality rate of suicide found 39.6 per 100,000 (0.04%) in Bangladesh.¹⁹ Approximately 4% adults in the general population report a history of DSH and up to 1% report frequent involvement in such behavior. DSH was found in about 20% of the adults and 40-80% of the Adolescents with psychiatric disorder.²⁰ In our study 19 % patients had suicidal attempt.

Respondents who showed OCD symptoms only since the start of COVID-19 were significantly more likely to have moderate/high stress, likely GAD and likely MDD. Similarly, respondents who engaged in compulsive hand washing were significantly more likely to have moderate/high stress and likely GAD but not likely MDD.⁸ Associated anxiety and depression might be cause of increase suicidal ideation among patients having OCD during pandemic. Physical comorbidity was present among 55.6% of patients in our study. Diseases of the skin was present among 17.6% which was the highest among all comorbidities as expected, followed by 8.5% diabetes mellitus (DM), 7.2% respiratory problem including asthma and 5.9% hypertension (HTN). In a local study with patients having severe mental illness (N=1648) overall 42% of the respondents had physical comorbidity where DM (28.47%) was the most common followed by HTN (26.45%). Diseases of the skin was present among 1.73% of the respondents.¹⁶

A significant proportion of persons with OCD experienced their symptoms first time during COVID outbreak. People both with and without diagnosed OCD prior to the pandemic generally experienced worsened OCD symptoms during the COVID-19 pandemic. However, the responses are heterogeneous and many factors other than the pandemic seemed to be responsible. To prevent the impairment of symptoms and the development of new cases, close monitoring of patients with OCD and education of the general public is essential. Limitations of our study was small sample size and

purposive sampling. Literature is still limited so more national and multinational, cross-cultural, longitudinal studies are essential.

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