

Prevalence and risk factors for suicidal ideation in adults with obsessive-compulsive disorder

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Background: Suicide is highly prevalent in patients with obsessive-compulsive disorder (OCD) and an estimated 6 to 51.7% patients attempt suicide. Early determination of risk factors can provide an opportunity for prevention and intervention.

Objectives: To estimate the prevalence of suicidal ideation in OCD patients and assess association between sociodemographic factors and presence of suicidal ideation.

Methods: A cross-sectional study was conducted in OCD clinic, outpatient and inpatient settings at the Department of Psychiatry in Bangabandhu Sheikh Mujib Medical University (BSMMU) in between 2019 to 2021. By convenient sampling technique, 60 OCD patients were enrolled in the study. They were interviewed using a semi-structured sociodemographic questionnaire along with Bangla version of the Modified Scale for Suicidal Ideation (MSSI).

Results: Out of the total 60 patients, 18 (30%) reported to have suicidal ideation in the last two days before interview. Suicidal ideation was more common among females ($p=0.018$). Across age groups, educational statuses, occupational statuses, family types, marital statuses, residences, family history of mental illness and substance use pattern, presence or absence of suicidal ideations did not vary.

Conclusions: One-third of OCD patients reported suicidal ideations. Female gender appeared as a risk factor.

Declaration of interest: None

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Keywords: Obsessive-compulsive disorder; OCD; suicidal ideation.

Introduction

Obsessive-Compulsive Disorder (OCD), characterized by presence of obsessions and/or compulsions is a common chronic debilitating psychiatric disorder that affects 0.7% adults in Bangladesh.¹ Suicide which is a major public health problem and one of the top ten causes of death and burden of disease worldwide, across all age groups has been found to be intricately related with OCD.² Two systematic reviews indicated rates of suicidal attempts in OCD ranging from 1% to 51.7%.^{3,4} Research suggests

patients with OCD are at increased risk for suicide attempt compared to the general population and they had 3 to 10 times higher risk of dying by suicide compared to the general population, both in its uncomplicated and comorbid forms.^{5,6}

A wide range of risk factors have been identified for suicidal behaviors that include male sex, young and old age, social isolation, unemployment, unmarried, divorced,

presence of mental illnesses like depression, personality disorder, schizophrenia, substance use, chronic medical conditions, family distress, recent life events, previous suicidal attempt, etc., of which some of the risk factors of suicide are also prevalent in OCD patients such as depression, schizophrenia, family distress.⁷ Also, in South Asian countries, patterns of suicide appear to be different from Western countries.⁸ This study was attempted to fill up the evidence-based knowledge gap in this area. We felt that the findings would help to understand the Bangladeshi cultural perspective in suicidal behavior among OCD patients and improve the quality of life of patients.

Methods

A cross-sectional study was conducted in OCD clinic, outpatient and inpatient settings at the Department of Psychiatry in Bangabandhu Sheikh Mujib Medical University (BSMMU), Bangladesh in between 2019 and 2021. Beforehand, ethical clearance was taken from the respected authority before and informed written consent was taken from each participant. Individuals diagnosed with OCD and have age 18 or more were enrolled by convenient sampling. Exclusion criteria was patients who have severe organic or mental illness. A semi-structured questionnaire was used to collect sociodemographic data. Bangla version of the Modified Scale for Suicidal Ideation (MSSI)^{9,10} was used to obtain information about the nature and intensity of suicidal thoughts in OCD patients. Statistical analysis of the results was done by using computer based statistical software, SPSS-IBM version 23. P value of less than 0.05 was considered as statistically significant.

Results

Mean±SD age of the patients was 26.5±6.7 years with a range between 18-48. Majority of the patients (60%) were in 18-27 years age group, males (56.7%), came from extended families (83.3%), unmarried (56.7%), Muslims (98.3%) and resided in urban areas (70%). About 16.7% of them were abusing tobacco. Figure 1 depicts the distribution of severity of suicidal ideation in OCD patients. Out of the total 60 OCD patients, 18 (30%) reported presence of suicidal ideation.

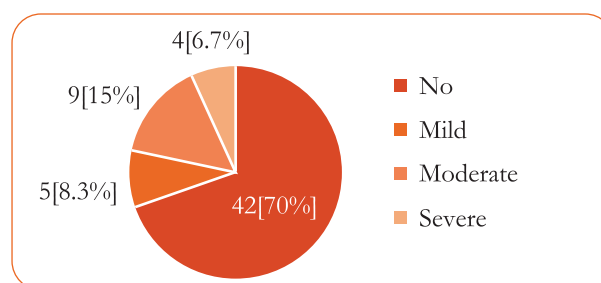


Figure 1: Frequency and percentage of severity of suicidal ideation in OCD patients (N=60)

While analyzing differences in suicidal ideation across various sociodemographic variables, we found suicidal ideation was significantly more common in females ($p=0.018$). However, across age group, educational status, occupational status, family types, marital statuses, residences, family history of mental illness and substance use, pattern of presence or absence of suicidal ideations did not vary (Table 1).

Table 1: Differences in suicidal ideations across various sociodemographic factors in OCD patients (N=60)

Variable	Suicidal ideation		P value
	Present n (%)	Absent n (%)	
Age (year)			
18-27	11 (61.1)	25 (59.5)	0.833
28-37	5 (27.8)	14 (33.3)	
38-48	2 (11.1)	3 (7.1)	
Gender			
Male	6 (33.3)	28 (66.7)	0.018
Female	12 (66.7)	14 (33.3)	
Educational status			
Primary	5 (27.8)	4 (9.5)	0.287
Secondary	4 (22.2)	9 (21.4)	
Higher secondary	4 (22.2)	10 (23.8)	
Graduation and above	5 (27.8)	19 (45.2)	
Occupation			
Unemployed	2 (11.1)	5 (11.9)	0.338
Student	8 (44.4)	12 (28.6)	
Housewife	4 (22.2)	6 (14.3)	
Business	2 (11.1)	2 (4.8)	
Service	2 (11.1)	16 (38.1)	
Others	-	1 (2.4)	
Family type			
Nuclear	4 (22.2)	6 (14.3)	0.343
Extended	14 (77.8)	36 (85.7)	

Variable	Suicidal ideation		P value
	Present n (%)	Absent n (%)	
Marital status			
Married	10 (55.6)	16 (38.1)	0.167
Unmarried	8 (44.4)	26 (61.9)	
Residence			
Rural	5 (27.8)	13 (31)	0.531
Urban	13 (72.2)	29 (69)	
Family history of mental illness			
Yes	4 (22.2)	13 (31)	0.360
No	14 (77.8)	29 (69)	
Substance use			
Yes	1 (5.6)	9 (21.4)	0.126
No	17 (94.4)	33 (78.6)	

Discussion

Suicide is highly prevalent and an important cause of death in patients with obsessive-compulsive disorder. High levels of suffering, disability and impairment are associated with this disorder. But, suicidal behaviour in patients with OCD have received less attention.

So, the aim of the study was to determine prevalence of suicidal ideations in OCD patients and explore whether sociodemographic variables were associated with elevated risk of suicidal ideation. This section compares the findings with other published works on similar subjects while reflecting situation in real practice.

Angelakis et al. reported that suicidal attempts in OCD patients range from 1% to 46.3% while Albert et al. described the figure as between 6% and 51.7%.^{3,4} Balci and Sevincok observed 44 patients and reported that 26% had at least one lifetime suicidal attempt and 20-46% had suicidal ideations.¹¹ In this study about one-third (30%) of the patients reported to have suicidal ideation of which mild suicidal ideation was present in 8.3% patients, moderate in 15% and severe in 6.7%. In this regard, the prevalence found in this study is similar to previous study findings.

Moreover, patients with OCD have 3 to 10 times higher risk of dying by suicide compared to the general population.^{3,4} So, findings of this study about suicidal ideation are in line with previous reports on suicidal tendency in OCD.

In this study, enrolled patients' mean age was 26.5. Fenske

and Petersen (2015) reported that, 19.5 is the mean age of onset for OCD. Such difference may be due to small study population, delay in noticing symptoms or delay in treatment seeking.

Globally, death by suicide occurred about 1.8 times more often among males than females and in China and Bangladesh, male to female ratio found was 0.8.¹² In the western world, males die by suicide three to four times more often than do females; however, suicidal attempts are between two and four times more frequent among females.¹³ We can infer from this attempted suicide ratio, why in our sample females showed more suicidal ideation. In general population, high suicide risk is associated with the following occupations: farmers, doctors, nurses, dentists, veterinarians, pharmacists, the police, the military, sailors and artists.¹⁴ Main occupations found in this study were business, service, housewife, student, unemployed etc. From this pattern, inferences can be drawn that this study could not find the influence of occupation with suicidal ideation. In Asian countries, married females and divorced males may be more like to attempt suicide.¹⁵

However, in this sample of OCD patients no such pattern was observed. Such difference may be due to relatively small study population or convenient sampling technique. Reviews and epidemiological data also indicate that there exists wide urban-rural disparity in suicide, with suicidal rates often greater in rural areas.¹⁶ Family history of mood disorders, psychosis and suicide may confer higher suicidal risk among family members.¹⁷ This sample of OCD patients didn't show such patterns; reason could be that it was an urban dominated sample, so failed to generate enough statistical power to create such association. Additionally, when family history of mental illnesses was present, they were mostly anxiety disorders and OCD rather than mood disorders and psychosis. One patient reported family history of suicide in this study.

Finally, substance use disorders are among the most frequent psychiatric disorders found in suicides and between 19-63% of all suicides suffered from substance use disorders, mostly from alcohol, opioid, cocaine, inhalant use.^{18,19} In this study, 16.7% of the patients reported substance abuse, all were tobacco abusers, hence association might not be established.

Limitations include cross-sectional study design, which limits the strength of causal relationship. Also, sample was enrolled from a single center, so generalizability might be an issue.

Conclusions

Findings revealed one-third of the OCD patients experienced suicidal ideations in the past two days before interview. Female gender appeared to be associated with elevated risk of suicidal ideation.

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