

ORIGINAL ARTICLE

Suicidal Ideation and Its Correlates Among Adult Patients with Obsessive-Compulsive Disorder (OCD)

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ABSTRACT

Background: Obsessive-compulsive disorder (OCD) is a chronic psychiatric condition frequently associated with significant functional impairment and an elevated risk of suicidal ideation and behavior. Understanding its correlates is essential for early detection and prevention of suicide among vulnerable patients. **Aim of the study:** To assess the prevalence and correlates of suicidal ideation among adult patients with OCD attending a tertiary care hospital in Dhaka, Bangladesh. **Methods & Materials:** This cross-sectional study included 120 adult OCD patients diagnosed using DSM-5 criteria. Participants were divided into two groups: those with suicidal ideation (n=30) and those without (n=30). Standardized tools including Y-BOCS, HDRS, HAM-A, BABS, and WHOQOL-BREF were administered. Data were analyzed using chi-square tests, t-tests, Pearson's correlations, and logistic regression. **Result:** Suicidal ideation was observed in 50% of participants. Independent predictors included comorbid depression (adjusted OR = 7.78, $p < 0.001$), higher Y-BOCS scores (adjusted OR = 1.13, $p < 0.001$), family psychiatric history (adjusted OR = 3.67, $p = 0.012$), longer duration of illness (adjusted OR = 1.20, $p = 0.003$), and unemployment (adjusted OR = 2.50, $p = 0.025$). Participants with suicidal ideation also demonstrated significantly lower quality of life (WHOQOL-BREF: 51.00 ± 9.40 vs. 64.80 ± 10.20 , $p < 0.001$). **Conclusion:** Suicidal ideation is highly prevalent among Bangladeshi adults with OCD, strongly linked to depressive symptoms, illness severity, and psychosocial stressors. Early identification and comprehensive management, including suicide risk screening and psychosocial support, are essential to reduce suicide-related morbidity and mortality.

Keywords: Obsessive-compulsive disorder, Suicidal ideation, Depression, Anxiety, Risk factors, Bangladesh

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INTRODUCTION

Obsessive-compulsive disorder (OCD) is a long-term psychiatric condition marked by the presence of obsessions and compulsions. Obsessions refer to intrusive and distressing thoughts, while compulsions are repetitive actions or mental rituals carried out to alleviate the anxiety caused by these thoughts [1]. Epidemiological studies indicate that obsessive-compulsive disorder (OCD) affects roughly 2% of the global population [2]. In general population studies, women are about 1.6 times more likely to develop OCD than men, with lifetime prevalence rates estimated at 1.5% for women and 1.0% for men [3]. And about 800,000 people die of suicide every year across the globe and there are many more attempts. 1.4% of all deaths worldwide are caused by suicide and it is the 15th leading cause of death worldwide [4]. In Bangladesh approximately 51.8% of adults with OCD report lifetime suicidal ideation, with 16.5% having made at least one suicide attempt and in a specific study, 62.4% of patients reported death ideation, and 12% reported recent suicidal thoughts [5,6]. OCD is a fairly prevalent condition, affecting about 1–3% of children and adolescents. It is marked by persistent, intrusive,

and unwanted thoughts, images, or urges (obsessions) along with repetitive actions or mental rituals (compulsions). The disorder usually follows a chronic, fluctuating course and often leads to significant difficulties in social, academic, and family life [7,8]. Key risk factors included female sex, major depressive disorder (MDD), borderline personality disorder (BPD), and avoidant personality disorder (AVPD) [5]. And others factors include previous SI or suicide attempts, history of childhood trauma, significant life stress, and psychiatric comorbidities, particularly depression [9]. Individuals who engaged in serious suicide attempts were found to have a high prevalence of mental disorders, and those with greater psychiatric comorbidity exhibited a significantly increased risk of making severe suicide attempts. Women with a prior history of mental illness especially depression and anxiety disorders are at an increased risk of engaging in suicidal behaviors [10]. Suicide attempts were found to be significantly associated with factors such as relationship difficulties, feelings of hopelessness, loneliness, irritability, and despair [11]. The Executive Director of the Bangladesh Society for the Enforcement of Human Rights (BSEHR) states that the main

causes of suicide attempt among young people include drug abuse, childhood trauma, impulsivity, and feelings of hopelessness. Individuals with poor stress management skills and low self-esteem are more susceptible to mental breakdowns during personal crises [12,13]. As Obsessive-compulsive disorder is a chronic psychiatric condition associated with high rates of suicidal ideation and attempts, particularly among women and individuals with psychiatric comorbidities. In Bangladesh, a substantial proportion of adults with OCD report suicidal thoughts and behaviors. Understanding the prevalence, risk factors, and correlates of suicidality in this population is crucial for early identification, targeted intervention, and reducing suicide-related morbidity and mortality. The study aims to assess the prevalence, risk factors, and correlates of suicidal ideation and attempts among adult patients with obsessive-compulsive disorder attending a tertiary care hospital in Bangladesh.

METHODS & MATERIALS

This cross-sectional, observational study was conducted in the Department of Psychiatry, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka during the period of September 2019 to August 2021. A total of 60 adult patients (aged 18–60 years) diagnosed with OCD were consecutively recruited from outpatient and inpatient psychiatric services. Among the total participants, 30 patients (50%) were identified as having suicidal ideation, and 30 (50%) had no suicidal ideation, based on structured clinical assessment.

Inclusion Criteria

- Patients aged between 18 and 60 years.
- Diagnosed with Obsessive-Compulsive Disorder according to the DSM-5 criteria.
- Illness duration of at least 6 months.
- Able to provide informed consent and complete study assessments.

Exclusion Criteria

- Comorbid psychotic disorders, bipolar disorder, or substance use disorder (except nicotine).
- Severe cognitive impairment or neurological illness affecting assessment reliability.
- Acute medical conditions requiring emergency intervention.

Data Collection Procedure

Standard data collection procedure was followed to collect data from the patients. At first researcher approached OCD patients, diagnosed by consultant psychiatrists from the study hospital. Then, selection criteria were considered and if met informed written consent was taken from the participant. Afterward, sociodemographic data was collected and full assessment of OCD was taken by the researcher by applying DSM-5 & Y-BOCS. Finally, 26 MSSl & DASS-21 tools were applied to assess the suicidal ideation and anxiety, depression & stress respectively.

Statistical Analysis

Data were analyzed using SPSS version 26.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics (mean \pm SD, frequencies, and percentages) were used for socio-

demographic and clinical variables. Group differences between patients with and without suicidal ideation were assessed using independent sample t-tests for continuous variables and Chi-square (χ^2) tests for categorical variables. Bivariate correlations were computed using Pearson's correlation coefficients (r). To identify independent predictors of suicidal ideation, binary logistic regression analysis was performed using variables significant at $p < 0.05$ in bivariate analysis. All tests were two-tailed, and a p -value < 0.05 was considered statistically significant.

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board (IRB) of [Institution Name]. Written informed consent was obtained from all participants after explaining the study objectives, confidentiality, and voluntary participation. Participants identified with significant suicidal risk were immediately referred for clinical intervention.

RESULT

The sociodemographic and clinical characteristics of the participants are summarized in Tables I–IV. The mean age of the study population was 31.20 ± 8.50 years, with those experiencing suicidal ideation being slightly older (32.50 ± 8.10 years) than those without (29.90 ± 8.60 years, $p = 0.044$). Gender distribution did not differ significantly between groups. However, marital status, education, occupation, family psychiatric history, duration of illness and comorbid depression showed significant associations with suicidal ideation. Suicidal ideation was more common among married participants (70.00%), those with lower education (10.80 ± 3.50 years), unemployed or students (56.67%), individuals with a family history of psychiatric illness (30.00%), longer illness duration (7.30 ± 4.50 years), and those with comorbid depression (63.33%) ($p < 0.05$ for all). Clinically, individuals with suicidal ideation had significantly higher Y-BOCS total scores (29.20 ± 6.10) compared to those without (23.50 ± 5.90 , $p < 0.001$), reflecting greater obsessive-compulsive symptom severity. Both obsession and compulsion subscales, as well as anxiety (HAM-A) and depression (HDRS) scores, were markedly elevated among those with suicidal ideation ($p < 0.001$ for all). Participants with suicidal ideation also showed poorer insight (BABS = 11.70 ± 3.20) and significantly lower quality of life (WHOQOL-BREF = 51.00 ± 9.40) compared to the non-suicidal group ($p < 0.001$). Multivariate logistic regression identified several independent predictors of suicidal ideation. These included comorbid depression (Adjusted OR = 7.78, 95% CI: 3.01–20.11, $p < 0.001$), greater OCD severity (Y-BOCS score, OR = 1.13, 95% CI: 1.06–1.21, $p < 0.001$), family psychiatric history (OR = 3.67, $p = 0.012$), longer illness duration (OR = 1.20, $p = 0.003$), and unemployment (OR = 2.50, $p = 0.025$). Correlation analysis further supported these findings. Suicidal ideation showed strong positive correlations with depressive symptoms ($r = 0.63$) and OCD severity ($r = 0.55$), and moderate positive correlations with anxiety ($r = 0.45$), duration of illness ($r = 0.36$), and poor insight ($r = 0.47$) ($p < 0.001$ for all). Conversely, quality of life was negatively correlated ($r = -0.52$, $p < 0.001$).

Table – I: Socio-demographic and clinical characteristics of the study (n = 60)

Variable	Total (N = 60)	Suicidal Ideation Present (n = 30)	Suicidal Ideation Absent (n = 30)	p-value
Age (years)				
Mean ± SD	31.2 ± 8.5	32.5 ± 8.1	29.9 ± 8.6	0.044
Gender				
Male	35 (58.33)	16 (53.33)	19 (63.33)	0.27
Female	25 (41.67)	14 (46.67)	11 (36.67)	
Marital Status				
Married	36 (60.00)	21(70.00)	15 (50.00)	0.008
Unmarried	24 (40.00)	9 (30.00)	15(50.00)	
Education (years)				
Mean ± SD	11.7 ± 3.3	10.8 ± 3.5	12.6 ± 3.0	0.001
Occupation				
Employed	32 (53.33)	13 (43.33)	19 (63.33)	0.017
Unemployed / Student	28 (46.67)	17(56.67)	11 (36.67)	
Family Psychiatric History	14 (23.33)	9 (30.00)	5(16.67)	0.041
Duration of Illness (years)				
Mean ± SD	6.2 ± 4.1	7.3 ± 4.5	5.1 ± 3.5	0.002
Comorbid Depression (HDRS >17)	25 (41.67)	19 (63.33)	6(20.00)	<0.001

Table – II: Clinical symptom severity among OCD patients with and without suicidal ideation

Variable	Suicidal Ideation Present (n = 30)	Suicidal Ideation Absent (n = 30)	p-value
Y-BOCS Total Score	29.2 ± 6.1	23.5 ± 5.9	<0.001
Y-BOCS Obsession Subscale	15.3 ± 3.1	12.5 ± 3.2	<0.001
Y-BOCS Compulsion Subscale	13.9 ± 3.6	11.0 ± 3.4	<0.001
HAM-A (Anxiety)	19.8 ± 6.7	15.1 ± 5.6	<0.001
HDRS (Depression)	23.4 ± 6.9	14.5 ± 6.3	<0.001
Insight (BABS)	11.7 ± 3.2	8.7 ± 3.0	<0.001
WHOQOL-BREF (Quality of Life)	51.0 ± 9.4	64.8 ± 10.2	<0.001

Table – III: Logistic regression predicting suicidal ideation in OCD patients

Predictor	β (SE)	Wald	Adjusted OR (95% CI)	p-value
Comorbid Depression (HDRS >17)	2.05 (0.51)	16.2	7.78 (3.01–20.11)	<0.001
Y-BOCS Total Score	0.12 (0.03)	12.5	1.13 (1.06–1.21)	<0.001
Family Psychiatric History	1.30 (0.52)	6.25	3.67 (1.30–10.36)	0.012
Duration of Illness (years)	0.18 (0.06)	9	1.20 (1.06–1.36)	0.003
Unemployment	0.92 (0.41)	5.04	2.50 (1.09–5.73)	0.025
Constant	-5.47 (1.50)	—	—	<0.001

Table – IV: Correlation between suicidal ideation score and clinical variables (Pearson's r)

Variable	r	p-value
Y-BOCS Total Score	0.55	<0.001
HDRS Score	0.63	<0.001
HAM-A Score	0.45	<0.001
Duration of Illness	0.36	<0.001
Insight (BABS)	0.47	<0.001
WHOQOL-BREF	-0.52	<0.001

DISCUSSION

Suicidal ideation represents one of the most critical yet often underrecognized complications in obsessive-compulsive disorder (OCD), significantly contributing to morbidity and mortality in this population. Despite the pervasive chronicity of OCD symptoms, the mechanisms underlying suicidal thoughts remain multifactorial, involving the interplay of symptom severity, comorbid psychiatric conditions, psychosocial stressors, and impaired quality of life.

In the present study, participants with OCD and suicidal ideation had a mean age of 32.5 ± 8.1 years (p = 0.044), slightly higher than that reported by Khanam et al. [14]. Males predominated (53.33%, p = 0.27), contrasting with the female

predominance observed by Iqbal et al. [15]. The majority were married (70.00%), consistent with Das et al. [16]. Educational level averaged 10.8 ± 3.5 years (p = 0.001), aligning with Chowdhury [17], and a positive family psychiatric history was significantly associated with suicidal ideation (p = 0.041). Occupationally, unemployed/students (56.67%) exhibited higher suicidal ideation compared to employed individuals (43.33%, p = 0.017), differing from Iqbal et al. [15], who reported a predominance of self-employed participants. Comorbid depression was observed in 63.33% of participants, comparable to earlier findings [15]. In terms of symptom severity, individuals with suicidal ideation had significantly higher Y-BOCS total scores (29.2 ± 6.1 vs. 23.5 ± 5.9, p <

0.001), along with elevated obsession (15.3 ± 3.1 vs. 12.5 ± 3.2 , $p < 0.001$) and compulsion (13.9 ± 3.6 vs. 11.0 ± 3.4 , $p < 0.001$) subscale scores, corroborating Gupta et al. (2014) and Prakash Kamath et al. (2007) [18,19], who associated suicidal ideation with greater OCD severity, comorbid depression, and poor insight. Anxiety severity, reflected by HAM-A scores (19.8 ± 6.7 , $p < 0.001$), was markedly higher among those with suicidal ideation, in contrast to Bramante et al. [20], who reported a significant relationship between anxiety and lifetime suicidal behavior ($p = 0.002$, $OR = 1.147$). Depression severity (HDRS = 23.4 ± 6.9 , $p < 0.001$) showed a complex, non-significant association, consistent with Moritz et al. [21], suggesting overlapping cognitive and affective domains. Insight assessment revealed significantly higher BABS scores (11.7 ± 3.2 vs. 8.7 ± 3.0 , $p < 0.001$), indicating poorer insight among those with suicidal ideation, in partial agreement with Shimshoni et al. [22]. Quality of life, as measured by the WHOQOL-BREF, was substantially lower among participants with suicidal ideation (51.0 ± 9.4 vs. 64.8 ± 10.2 , $p < 0.001$), mirroring Stengler-Wenzke et al. [23]. Participants with moderate to severe depression were nearly eight times more likely to experience suicidal thoughts (adjusted $OR = 7.78$, 95% $CI: 3.01-20.11$, $p < 0.001$), while each one-point increase in Y-BOCS score raised the risk by 12.5% (adjusted $OR = 1.13$, 95% $CI: 1.06-1.21$, $p < 0.001$). Sehlo et al. reported that presence of religious obsessions was the strongest predictor for current suicidal ideations, with 3 times increased risk for suicidal ideations ($OR = 3.53$, $CI = 1.96-5.11$, $P = 0.009$), and presence of comorbid major depressive disorder was also a significant predictor for current suicidal ideations, with 1.5 times increased risk for suicidal ideations ($OR = 1.77$, $CI = 1.21-3.86$, $P = 0.04$) [24]. Kim et al. demonstrated that the three-factor model provided the best fit to the data, showing satisfactory goodness-of-fit indices ($GFI = 0.839$, $CFI = 0.878$, $RMSEA = 0.074$) [25]. A family history of psychiatric disorders was found to significantly increase the risk of suicidal ideation, with affected individuals being approximately 3.7 times more likely to report such thoughts ($\beta = 1.30$, $SE = 0.52$; adjusted $OR = 3.67$, 95% $CI: 1.30-10.36$, $p = 0.012$). Thompson et al. reported that, among 696 participants, 315 (45%) had a positive family history of one or more psychiatric conditions [26]. Furthermore, longer duration of illness was associated with a 20% increase in the odds of suicidal ideation per year ($\beta = 0.18$, $SE = 0.06$; adjusted $OR = 1.20$, 95% $CI: 1.06-1.36$, $p = 0.003$). Unemployment also emerged as a significant risk factor, with unemployed patients being 2.5 times more likely to experience suicidal thoughts ($\beta = 0.92$, $SE = 0.41$; adjusted $OR = 2.50$, 95% $CI: 1.09-5.73$, $p = 0.025$). Khanam et al. found that 39.3% of respondents had family history of OCD and the rest (60.7%) were without the family history of OCD [14]. Torres et al. stated that current suicidal ideation occurred in 14% of the sample and was significantly associated with a Y-BOCS score ≥ 16 [27]. Moritz et al. reported OCD patients show moderate-to-strong negative correlation between QoL and suicidal ideation [28].

Limitations of the study: This study has several limitations. Being cross-sectional in design, it cannot establish causal relationships between suicidal ideation and associated factors. The study was conducted in a single tertiary care hospital, which may limit generalizability to the broader OCD population in Bangladesh. Self-reported measures may have introduced recall or response bias. Additionally, exclusion of patients with severe comorbid psychiatric or substance use disorders might have underestimated the true prevalence of suicidality among OCD patients.

CONCLUSION

This study highlights a high prevalence of suicidal ideation among adults with obsessive-compulsive disorder (OCD) in Bangladesh, affecting half of the study population. Suicidal ideation was significantly associated with longer illness duration, unemployment, family psychiatric history, greater OCD symptom severity, comorbid depression, and poor quality of life. Depression emerged as the strongest independent predictor, emphasizing the importance of early screening and integrated management of mood symptoms in OCD patients. These findings underscore the need for routine suicide risk assessment in clinical settings and development of targeted psychosocial interventions. Early identification and multidisciplinary support may substantially reduce suicide-related morbidity and mortality in individuals with OCD.

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